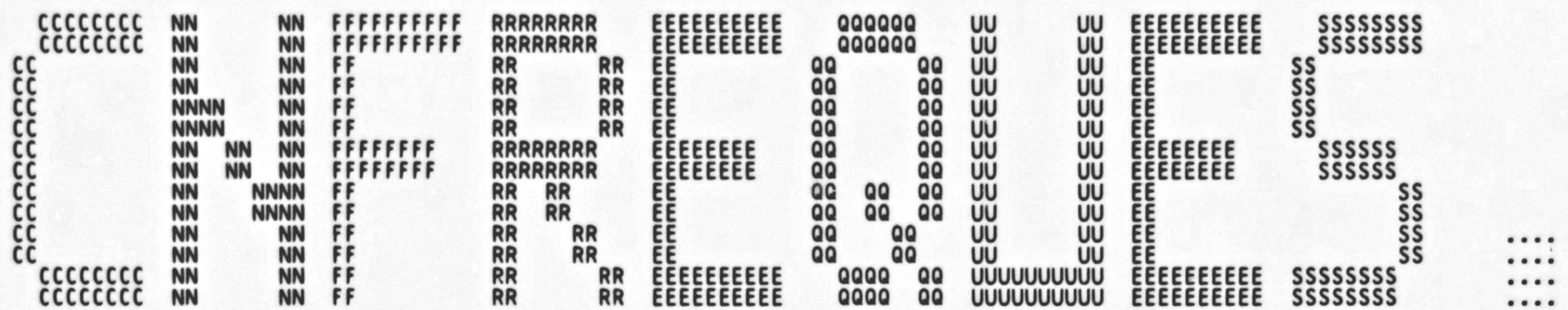
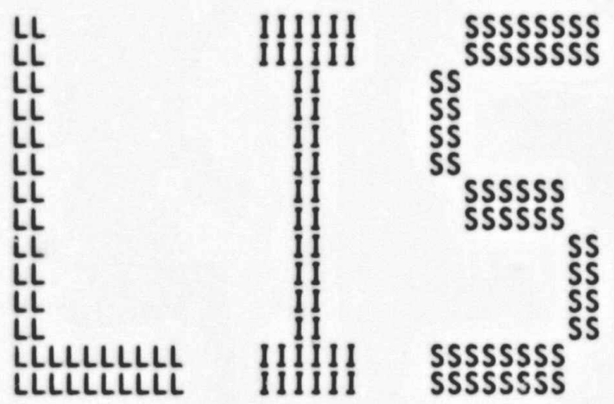
```
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFFFFFFFFFFFFFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFFFFFFFFFFFFFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFFFFFFFFFFFFFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNNNNN       NNN        III       CCC             NNNNNN       NNN  FFF
NNNNNN       NNN        III       CCC             NNNNNN       NNN  FFF
NNNNNN       NNN        III       CCC             NNNNNN       NNN  FFF
NNN    NNN   NNN        III       CCC             NNN    NNN   NNN  FFFFFFFFFFF
NNN    NNN   NNN        III       CCC             NNN    NNN   NNN  FFFFFFFFFFF
NNN    NNN   NNN        III       CCC             NNN    NNN   NNN  FFFFFFFFFFF
NNN       NNNNNN        III       CCC             NNN       NNNNNN  FFF
NNN       NNNNNN        III       CCC             NNN       NNNNNN  FFF
NNN       NNNNNN        III       CCC             NNN       NNNNNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN        III       CCC             NNN          NNN  FFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFF
NNN          NNN     IIIIIIIII       CCCCCCCCCCC  NNN          NNN  FFF
```


CNFREQUES


LIST

```
;  1     0001  0 %TITLE  'DECnet Ethernet Configurator Module'
;  2     0002  0 MODULE CNFREQUES        (
;  3     0003  0                         LANGUAGE (BLISS32),
;  4     0004  0                         IDENT = 'V04-000'
;  5     0005  0                         ) =
;  6     0006  1 BEGIN
;  7     0007  1
;  8     0008  1 !
;  9     0009  1 !*****************************************************************************
; 10     0010  1 !*                                                                           *
; 11     0011  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
; 12     0012  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
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; 21     0021  1 !*                                                                           *
; 22     0022  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE   *
; 23     0023  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
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; 25     0025  1 !*                                                                           *
; 26     0026  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS   *
; 27     0027  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
; 28     0028  1 !*                                                                           *
; 29     0029  1 !*                                                                           *
; 30     0030  1 !*****************************************************************************
; 31     0031  1 !
; 32     0032  1
; 33     0033  1 !++
; 34     0034  1 ! FACILITY:     DECnet Configurator Module (NICONFIG)
; 35     0035  1 !
; 36     0036  1 ! ABSTRACT:
; 37     0037  1 !
; 38     0038  1 !       This module contains the routines to process incoming requests
; 39     0039  1 !       by parsing them and dispatching to the appropriate routines.
; 40     0040  1 !
; 41     0041  1 ! ENVIRONMENT:  VAX/VMS Operating System
; 42     0042  1 !
; 43     0043  1 ! AUTHOR:       Bob Grosso,     CREATION DATE:  13-Oct-1982
; 44     0044  1 !
; 45     0045  1 ! MODIFIED BY:
; 46     0046  1 !
; 47     0047  1 !       V03-002 RPG0002         Bob Grosso              16-May-1983
; 48     0048  1 !               Correct the arguement list to a call to Signal.
; 49     0049  1 !
; 50     0050  1 !       V03-001 RPG0001         Bob Grosso              02-May-1983
; 51     0051  1 !               Check state of UNA.
; 52     0052  1 !--
```

```
;    54          0053  1 %SBTTL  'Definitions'
;    55          0054  1
;    56          0055  1 !
;    57          0056  1 ! INCLUDE FILES:
;    58          0057  1 !
;    59          0058  1
;    60          0059  1 LIBRARY 'SYS$LIBRARY:STARLET';                  ! VMS common definitions
;    61          0060  1
;    62          0061  1 LIBRARY 'SHRLIB$:NET';                          ! Network definitions
;    63          0062  1
;    64          0063  1 LIBRARY 'SHRLIB$:NMALIBRY';                     ! NICE code definitions
;    65          0064  1
;    66          0065  1 REQUIRE 'LIB$:CNFDEF.R32';
;    67          0156  1
;    68          0157  1 REQUIRE 'SRC$:CNFPREFIX.REQ';
;    69          0254  1
;    70          0255  1
;    71          0256  1 !
;    72          0257  1 ! BUILTIN functions
;    73          0258  1 !
;    74          0259  1
;    75          0260  1 BUILTIN
;    76          0261  1     INSQUE,                                  ! INSQUE instruction
;    77          0262  1     REMQUE;                                  ! REMQUE instruction
;    78          0263  1
;    79          0264  1
;    80          0265  1 !
;    81          0266  1 ! TABLE OF CONTENTS:
;    82          0267  1 !
;    83          0268  1
;    84          0269  1 FORWARD ROUTINE
;    85          0270  1
;    86          0271  1         CNF$PROCESS_REQUEST : NOVALUE,  ! Jacket routine for Process_request
;    87          0272  1         PROCESS_REQUEST,                ! Parse NICE and dispatch
;    88          0273  1         CNF_ENABLE_SURVEILLANCE,        ! Jacket routine for enable_surveillance
;    89          0274  1         ENABLE_SURVEILLANCE,            ! Set-up to prepare for setting surveillance
;    90          0275  1         SURVEIL,                        ! Begin surveillance of a circuit
;    91          0276  1         CNF$LOCATE_CIR_BLK,             ! Match an ASCII circuit name with a CIR control block
;    92          0277  1         CNF_DISABLE_SURVEILLANCE,       ! Jacket routine for disable_surveillance
;    93          0278  1         DISABLE_SURVEILLANCE,           ! set-up to prepare to discontinue circuit surveillance
;    94          0279  1         CNF$DISABLE_SURVEIL;            ! disabled surveillance of a circuit
;    95          0280  1
;    96          0281  1
;    97          0282  1
;    98          0283  1 !
;    99          0284  1 ! EXTERNAL REFERENCES:
;   100          0285  1 !
;   101          0286  1
;   102          0287  1 EXTERNAL ROUTINE
;   103          0288  1
;   104          0289  1
;   105          0290  1 !   Module CNFMAIN
;   106          0291  1         CNF$EXIT,                       ! Clean up and exit
;   107          0292  1         CNF$TRACE,                      ! Log messages to log file
;   108          0293  1         CNF$LOG_DATA,                   ! Log messages to log file
;   109          0294  1         CNF$GET_ZVM,                    ! Get zeroed virtual memory
;   110          0295  1         CNF$FREE_VM,                    ! Free virtual memory
```

```
;  111     0296  1
;  112     0297  1 !   Module CNFSTORE
;  113     0298  1
;  114     0299  1         CNF$READ_SYSIDM,                    ! Issue QIO to listen on the NI
;  115     0300  1
;  116     0301  1 !   Module CNFSHOW
;  117     0302  1
;  118     0303  1         CNF$PROCESS_SHOW,                   ! Show Circuit and system IDs
;  119     0304  1
;  120     0305  1 !   Module CNFSEND
;  121     0306  1
;  122     0307  1         CNF$BUFR_NICE_MSG,
;  123     0308  1         CNF$BUFR_ERR_MSG,
;  124     0309  1         CNF$SEND_NICE_MSG,
;  125     0310  1
;  126     0311  1 !   Module CNFWORKQ
;  127     0312  1
;  128     0313  1         WKQ$ADD_WORK_ITEM;                  ! Add work to work queue
;  129     0314  1
;  130     0315  1 EXTERNAL ROUTINE
;  131     0316  1
;  132     0317  1         STR$COMPARE             : ADDRESSING_MODE (GENERAL);
;  133     0318  1
;  134     0319  1
;  135     0320  1 EXTERNAL LITERAL
;  136     0321  1
;  137     0322  1         CNF$_CHAN,              ! Error assigning or deassigning channel
;  138     0323  1         CNF$_DRVRSTRT,          ! Error while issuing startup command to driver
;  139     0324  1         CNF$_LOGIC,             ! Program logic error or unexpected condition
;  140     0325  1
;  141     0326  1 !   From CNFSTORE
;  142     0327  1         SYSIDM_BUFSIZ,
;  143     0328  1         ADRTYP_BUFSIZ,
;  144     0329  1
;  145     0330  1         CNF$C_SYNCH_EFN,
;  146     0331  1         CNF$C_ASYNCH_EFN;
;  147     0332  1
;  148     0333  1
;  149     0334  1 EXTERNAL
;  150     0335  1
;  151     0336  1         CNF$B_SURVEILLANCE_SET,             ! Boolean: mark if anything is under surveillance
;  152     0337  1         CNF$W_NETCHAN : WORD,               ! Channel opened to network
;  153     0338  1         CNF$GQ_CIRSURLST : VECTOR [2];      ! List of circuit under surveillance
;  154     0339  1
;  155     0340  1 OWN
;  156     0341  1     SUCCESS_NICE_DSC :
;  157     0342  1         BBLOCK [DSC$C_S_BLN] INITIAL
;  158     0343  1         (
;  159     0344  1             4,
;  160     0345  1             UPLIT (
;  161     0346  1                 BYTE (%X'01'),
;  162     0347  1                 WORD (%X'FFFF'),
;  163     0348  1                 BYTE (%X'00')
;  164     0349  1                 )
;  165     0350  1         );
```

```
;  167          0351  1 %SBTTL  'cnf$process_request'
;  168          0352  1 GLOBAL ROUTINE CNF$PROCESS_REQUEST (IRB) : NOVALUE =
;  169          0353  1
;  170          0354  1 !++
;  171          0355  1 ! FUNCTIONAL DESCRIPTION:
;  172          0356  1 !
;  173          0357  1 !  This routine is executed off the work queue.
;  174          0358  1 !  Parse the NICE message to determine the type of operation,
;  175          0359  1 !  and the circuits to be affected.  Dispatch to appropriate
;  176          0360  1 !  routine if entire message is correct.
;  177          0361  1 !
;  178          0362  1 ! FORMAL PARAMETERS:
;  179          0363  1 !
;  180          0364  1 !       irb     Interrupt request block, contains all the info for a connection
;  181          0365  1 !               to NICONFIG.  The IRB contains the NICE command which will
;  182          0366  1 !               be parsed.
;  183          0367  1 !
;  184          0368  1 ! IMPLICIT INPUTS:
;  185          0369  1 !       NONE
;  186          0370  1 !
;  187          0371  1 ! IMPLICIT OUTPUTS:
;  188          0372  1 !       NONE
;  189          0373  1 !
;  190          0374  1 ! ROUTINE VALUE:
;  191          0375  1 ! COMPLETION CODES:
;  192          0376  1 !       Success
;  193          0377  1 !
;  194          0378  1 ! SIDE EFFECTS:
;  195          0379  1 !       NONE
;  196          0380  1 !
;  197          0381  1 !--
;  198          0382  1
;  199          0383  2     BEGIN
;  200          0384  2     LOCAL
;  201          0385  2         CIRCUIT_DSC : BBLOCK [DSC$C_S_BLN],     ! Allocate circuit name descriptor here, whether it will be
;  202          0386  2                                                 !  or not, it makes book keeping much simpler.
;  203          0387  2         STATUS;
;  204          0388  2
;  205          0389  2     CH$FILL (0, DSC$C_S_BLN, CIRCUIT_DSC);              ! Zero the descriptor
;  206          0390  2     STATUS = PROCESS_REQUEST (.IRB, CIRCUIT_DSC);       ! Parse and act upon the command
;  207          0391  2     IF NOT .STATUS                                      ! If unsuccessful, buffer an error message for retur
;  208          0392  2     THEN
;  209          0393  2         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_RES, 0, .STATUS, 0);
;  210          0394  2
;  211          0395  2     CNF$SEND_NICE_MSG (.IRB);                           ! Issue QIO's to send NICE messages buffered
;  212          0396  2
;  213          0397  2     IF .CIRCUIT_DSC [DSC$W_LENGTH] NEQ 0                ! If a buffer was allocated to the descriptor, retur
;  214          0398  2     THEN
;  215          0399  2         CNF$FREE_VM (CIRCUIT_DSC [DSC$W_LENGTH], CIRCUIT_DSC [DSC$A_POINTER]);
;  216          0400  2
;  217          0401  2     RETURN TRUE;                                        ! Always return success, errors are sent via QIO bac
;  218          0402  1     END;                                                ! Routine cnf$process_request


                                                        .TITLE  CNFREQUES DECnet Ethernet Configurator Module
                                                        .IDENT  \V04-000\
```

```
                                                              .PSECT  $PLIT$,NOWRT,NOEXE,2

                                       01 00000 P.AAA:        .BYTE   1                                                    ;
                                     FFFF 00001               .WORD   -1                                                   ;
                                       00 00003               .BYTE   0                                                    ;

                                                              .PSECT  $OWN$,NOEXE,2

                                 00000004 00000 SUCCESS_NICE_DSC:
                                                              .LONG   4
                                 00000000' 00004              .ADDRESS P.AAA                                               ;

                                                              .EXTRN  CNF$EXIT, CNF$TRACE
                                                              .EXTRN  CNF$LOG_DATA, CNF$GET_ZVM
                                                              .EXTRN  CNF$FREE_VM, CNF$READ_SYSIDM
                                                              .EXTRN  CNF$PROCESS_SHOW
                                                              .EXTRN  CNF$BUFR_NICE_MSG
                                                              .EXTRN  CNF$BUFR_ERR_MSG
                                                              .EXTRN  CNF$SEND_NICE_MSG
                                                              .EXTRN  WKQ$ADD_WORK_ITEM
                                                              .EXTRN  STR$COMPARE, CNF$_CHAN
                                                              .EXTRN  CNF$_DRVRSTRT, CNF$_LOGIC
                                                              .EXTRN  SYSIDM_BUFSIZ, ADRTYP_BUFSIZ
                                                              .EXTRN  CNF$C_SYNCH_EFN
                                                              .EXTRN  CNF$C_ASYNCH_EFN
                                                              .EXTRN  CNF$B_SURVEILLANCE_SET
                                                              .EXTRN  CNF$W_NETCHAN, CNF$GQ_CIRSURLST

                                                              .PSECT  $CODE$,NOWRT,2

                                     003C 00000               .ENTRY  CNF$PROCESS_REQUEST, Save R2,R3,R4,R5      ; 0352
                    5E              08 C2 00002               SUBL2   #8, SP                                             ;
  08       00       6E              00 2C 00005               MOVC5   #0, (SP), #0, #8, CIRCUIT_DSC                      ; 0389
                                    6E    0000A
                                    5E DD 0000B               PUSHL   SP                                                 ; 0390
                              04    AC DD 0000D               PUSHL   IRB                                                ;
                 0000V  CF          02 FB 00010               CALLS   #2, PROCESS_REQUEST                                ;
                        11          50 E8 00015               BLBS    STATUS, 1$                                         ; 0391
                                    7E D4 00018               CLRL    -(SP)                                              ; 0393
                                    50 DD 0001A               PUSHL   STATUS                                             ;
                                    7E D4 0001C               CLRL    -(SP)                                              ;
                        7E          0F CE 0001E               MNEGL   #15, -(SP)                                         ;
                              04    AC DD 00021               PUSHL   IRB                                                ;
                 0000G  CF          05 FB 00024               CALLS   #5, CNF$BUFR_ERR_MSG                               ;
                              04    AC DD 00029 1$:           PUSHL   IRB                                                ; 0395
                 0000G  CF          01 FB 0002C               CALLS   #1, CNF$SEND_NICE_MSG                              ;
                                    6E B5 00031               TSTW    CIRCUIT_DSC                                        ; 0397
                                    0B 13 00033               BEQL    2$                                                 ;
                              04    AE 9F 00035               PUSHAB  CIRCUIT_DSC+4                                      ; 0399
                              04    AE 9F 00038               PUSHAB  CIRCUIT_DSC                                        ;
                 0000G  CF          02 FB 0003B               CALLS   #2, CNF$FREE_VM                                    ;
                                       04 00040 2$:           RET                                                        ; 0402

; Routine Size:  65 bytes,    Routine Base:  $CODE$ + 0000
```

```
;  220     0403  1 %SBTTL  'process_request'
;  221     0404  1 ROUTINE PROCESS_REQUEST (IRB, CIRNAM_DSC) =
;  222     0405  1
;  223     0406  1 !++
;  224     0407  1 !
;  225     0408  1 !  This routine is called by CNF$PROCESS_REQUEST which is
;  226     0409  1 !  executed off the work queue.
;  227     0410  1 !  Parse the NICE message to determine the type of operation,
;  228     0411  1 !  and the circuits to be affected.  Dispatch to appropriate
;  229     0412  1 !  routine if entire message is correct.
;  230     0413  1 !
;  231     0414  1 !
;  232     0415  1 !       irb             Interrupt request block, contains all the info for
;  233     0416  1 !                       a connection to NICONFIG.  The IRB contains the
;  234     0417  1 !                       NICE command which will be parsed.
;  235     0418  1 !
;  236     0419  1 !       cirnam_dsc      Descriptor for storing of circuit name if one is
;  237     0420  1 !                       specified in command.
;  238     0421  1 !
;  239     0422  1 !--
;  240     0423  1
;  241     0424  2     BEGIN
;  242     0425  2     MAP
;  243     0426  2         CIRNAM_DSC : REF BBLOCK [DSC$C_S_BLN],
;  244     0427  2         IRB : REF BBLOCK;                   ! Interrupt request block
;  245     0428  2
;  246     0429  2     LOCAL
;  247     0430  2         KNOWN,                              ! Was KNOWN CIRCUITS present in command
;  248     0431  2         NICE : REF BBLOCK,                  ! Pointer into NICE command
;  249     0432  2         FUNCTION : BBLOCK [1],
;  250     0433  2         OPTION : BBLOCK [1],
;  251     0434  2         PROCESSING_SHOW,                    ! Boolean, true = SHOW, false = SET
;  252     0435  2         SHOW_INFO,                          ! Coded for CHAR, SUMMARY or STATUS
;  253     0436  2         LEN_REMAINING,
;  254     0437  2         NICE_SURVEILLANCE : REF BBLOCK; ! Locate section of NICE command
;  255     0438  2                                         !  containing the SURVEILLANCE parameter
;  256     0439  2
;  257     0440  2     BIND
;  258     0441  2         CONF = UPLIT (%ASCIC 'CONFIGURATOR') : VECTOR [,BYTE];
;  259     0442  2
;  260     0443  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  261     0444  2         $DESCRIPTOR ('process_request'));
;  262     0445  2
;  263     0446  2     NICE = IRB [IRB$T_REQUEST];                 ! Beginning of NICE command
;  264     0447  2
;  265     0448  2     IF .IRB [IRB$W_IOSB1]                       ! The size of the NICE message was returned in the IOSB
;  266     0449  2         LSS 18                                  ! NICE message too short to contain
;  267     0450  2     THEN                                        ! function, option, and "CONFIGURATOR", and Circuit
;  268     0451  3         BEGIN
;  269     0452  3         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_INV, 0, 0, 0);
;  270     0453  3         RETURN TRUE;
;  271     0454  2         END;
;  272     0455  2
;  273     0456  2 !
;  274     0457  2 !       An Acceptable NICE message must conform with the following
;  275     0458  2 !
;  276     0459  2 !   Byte 1      Function byte, accept either CHANGE or READ
```

```
;   277     0460  2 !   Byte 2      Option Byte,
;   278     0461  2 !                 bits 0-2 contain the entity type. Accept only MODULE
;   279     0462  2 !                 For Function READ
;   280     0463  2 !                   bits 4-6 indicate summary/status/characteristics
;   281     0464  2 !                 For Function CHANGE
;   282     0465  2 !                   bit 6 indicates whether set/define or clear/purge
;   283     0466  2 !                   bit 7 indicates whether permanent or volatile,
;   284     0467  2 !                         accept only volatile
;   285     0468  2 !   Bytes 3-17  Module name ASCIC string, "CONFIGURATOR"
;   286     0469  2 !   Bytes 18,19 Code for circuit
;   287     0470  2 !   Byte 20     Code for Known, or count for circuit name
;   288     0471  2 !   Bytes 21-22 or Next two bytes after circuit name:
;   289     0472  2 !               code for surveillance
;   290     0473  2 !   Next byte   surveillance code, 0-Enabled, 1-Disabled
;   291     0474  2 !
;   292     0475  2
;   293     0476  2 !
;   294     0477  2 !   Check the specified option and accept only SET or SHOW
;   295     0478  2 !
;   296     0479  2     FUNCTION = .NICE [0,0,8,0];
;   297     0480  2     OPTION = .NICE [0,8,8,0];
;   298     0481  2
;   299     0482  2     IF .OPTION [NMA$V_OPT_PER]                  ! There is no permanent data base so
;   300     0483  2     THEN                                        ! DEFINE, LIST or PURGE not permitted
;   301     0484  3         BEGIN
;   302     0485  3         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_FUN, 0, 0, 0);
;   303     0486  3         RETURN TRUE;
;   304     0487  2         END;
;   305     0488  2
;   306     0489  2     IF .FUNCTION EQL NMA$C_FNC_CHA              ! If function is CHANGE, accept only SET
;   307     0490  2     THEN
;   308     0491  3         BEGIN
;   309     0492  3         IF .OPTION [NMA$V_OPT_CLE]
;   310     0493  3         THEN
;   311     0494  4             BEGIN                               ! CLEAR not permitted
;   312     0495  4             CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_FUN, 0, 0, 0);
;   313     0496  4             RETURN TRUE;
;   314     0497  3             END;
;   315     0498  3
;   316     0499  3         PROCESSING_SHOW = FALSE;                ! Must be a SET
;   317     0500  3         END
;   318     0501  2     ELSE
;   319     0502  3         BEGIN
;   320     0503  3         IF .FUNCTION EQL NMA$C_FNC_REA
;   321     0504  3         THEN
;   322     0505  4             BEGIN
;   323     0506  4             PROCESSING_SHOW = TRUE;             ! It's a SHOW
;   324     0507  4             SHOW_INFO = .OPTION [NMA$V_OPT_INF];  ! Characteristics, Summary or Status
;   325     0508  4             END
;   326     0509  3         ELSE                                    ! Only accept SET or SHOW
;   327     0510  4             BEGIN
;   328     0511  4             CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_FUN, 0, 0, 0);
;   329     0512  4             RETURN TRUE;
;   330     0513  3             END;
;   331     0514  2         END;
;   332     0515  2
;   333     0516  2 !
```

```
;  334     0517  2 !   Ensure that MODULE CONFIGURATOR was specified
;  335     0518  2 !
;  336     0519  2     IF .OPTION [NMA$V_OPT_ENT] NEQ NMA$C_ENT_MOD
;  337     0520  2     THEN
;  338     0521  3         BEGIN
;  339     0522  3         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_FUN, 0, 0, 0);
;  340     0523  3         RETURN TRUE;
;  341     0524  2         END;
;  342     0525  2
;  343     0526  2     IF NOT CH$EQL (.NICE [0,16,8,0], NICE [0,24,8,0], .CONF [0], CONF [1])
;  344     0527  2     THEN
;  345     0528  3         BEGIN
;  346     0529  3         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_FUN, 0, 0, 0);
;  347     0530  3         RETURN TRUE;
;  348     0531  2         END;
;  349     0532  2
;  350     0533  2 !
;  351     0534  2 !   Check for CIRCUIT Circuit-name, or for KNOWN CIRCUITS
;  352     0535  2 !
;  353     0536  2
;  354     0537  2     If .NICE [15,0,16,0] NEQ NMA$C_PCCN_CIR
;  355     0538  2     THEN
;  356     0539  3         BEGIN
;  357     0540  3         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_IDE, NMA$C_ENT_CIR, 0, 0);
;  358     0541  3         RETURN TRUE;
;  359     0542  2         END;
;  360     0543  2     IF .NICE [16,8,8,1] EQL NMA$C_ENT_KNO
;  361     0544  2     THEN                                        ! Known circuits
;  362     0545  3         BEGIN
;  363     0546  3         KNOWN = TRUE;
;  364     0547  3         NICE_SURVEILLANCE = NICE [16,16,8,0];
;  365     0548  3         END
;  366     0549  2     ELSE                                        ! Parse and store ASCIC circuit name
;  367     0550  3         BEGIN
;  368     0551  3         LOCAL
;  369     0552  3             CIRNAM_LEN,                         ! Use temp store, so that if CNF$GET_ZVM returns a failure,
;  370     0553  3                                                 !  calling routine won't erroneously attempt to deallocate
;  371     0554  3             CIRCUIT_PTR;
;  372     0555  3
;  373     0556  3         KNOWN = FALSE;
;  374     0557  3         CIRNAM_LEN = .NICE [16,8,8,0];
;  375   P 0558  3         EXECUTE (
;  376     0559  3           CNF$GET_ZVM ( CIRNAM_LEN, CIRNAM_DSC [DSC$A_POINTER]) );
;  377     0560  3         CIRNAM_DSC [DSC$W_LENGTH] = .CIRNAM_LEN;
;  378     0561  3         CIRCUIT_PTR = NICE [16,16,8,0];
;  379     0562  3
;  380     0563  3         !
;  381     0564  3         !   Check the length of the circuit name and ensure that it does
;  382     0565  3         !   not extend past the end of the NICE message.
;  383     0566  3         !
;  384     0567  4         IF  (.CIRCUIT_PTR - .NICE)              ! Address of circuit minus start of NICE gives length of NIC
;  385     0568  3             + .CIRNAM_DSC [DSC$W_LENGTH]        ! plus length of circuit name gives length of NICE message u
;  386     0569  3                GTR .IRB [IRB$W_IOSB1]           ! Does circuit name extend off end of NICE message?
;  387     0570  3         THEN
;  388     0571  4             BEGIN
;  389     0572  4             CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_IDE, NMA$C_ENT_CIR, 0, 0);
;  390     0573  4             RETURN TRUE;
```

```
;  391     0574  3              END;
;  392     0575  3
;  393     0576  3          CH$MOVE ( .CIRNAM_DSC [DSC$W_LENGTH], .CIRCUIT_PTR, .CIRNAM_DSC [DSC$A_POINTER]);
;  394     0577  3
;  395     0578  3
;  396     0579  3          !
;  397     0580  3          !   Surveillance code and value follows after circuit name
;  398     0581  3          !
;  399     0582  3          NICE_SURVEILLANCE = .CIRCUIT_PTR + . CIRNAM_DSC [DSC$W_LENGTH];
;  400     0583  3          END;
;  401     0584  2
;  402     0585  2      !
;  403     0586  2      !   Compute length of remaining unparsed NICE message.
;  404     0587  2      !
;  405     0588  2      LEN_REMAINING = .IRB [IRB$W_IOSB1] - (.NICE_SURVEILLANCE - .NICE);
;  406     0589  2
;  407     0590  2  !
;  408     0591  2  !   If SHOW then check that nothing is left unprocessed
;  409     0592  2  !
;  410     0593  2      IF .PROCESSING_SHOW
;  411     0594  2      THEN
;  412     0595  3          BEGIN
;  413     0596  3          IF .LEN_REMAINING NEQ 0                          ! There is excess NICE message left unprocessed for
;  414     0597  3          THEN
;  415     0598  4              BEGIN
;  416     0599  4              CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_SIZ, 0, 0, 0);
;  417     0600  4              RETURN TRUE;
;  418     0601  4              END
;  419     0602  3          ELSE
;  420     0603  3              EXECUTE (CNF$PROCESS_SHOW (.IRB, .KNOWN, .CIRNAM_DSC, .SHOW_INFO));
;  421     0604  3          END
;  422     0605  2      ELSE
;  423     0606  2
;  424     0607  2      !
;  425     0608  2      !   For SET, check for SURVEILLANCE TYPE (enabled = 0, disabled = 1)
;  426     0609  2      !   and dispatch to either enable or disable surveillance.
;  427     0610  2      !
;  428     0611  3          BEGIN
;  429     0612  3          IF .LEN_REMAINING NEQ 0                          ! If SURVEILLANCE not given, default to ENABLE
;  430     0613  3          THEN
;  431     0614  4              BEGIN
;  432     0615  4              IF .LEN_REMAINING NEQ 3
;  433     0616  4              THEN                                         ! Must be a word for surveillance code and
;  434     0617  5                  BEGIN                                    ! a byte for the surveillance value.
;  435     0618  5                  CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_PMS, NMA$C_PCCN_SUR, 0, 0);
;  436     0619  5                  RETURN TRUE;
;  437     0620  4                  END;
;  438     0621  4              IF .NICE_SURVEILLANCE [0,0,16,0] NEQ NMA$C_PCCN_SUR
;  439     0622  4              THEN
;  440     0623  5                  BEGIN
;  441     0624  5                  CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_PMS, NMA$C_PCCN_SUR, 0, 0);
;  442     0625  5                  RETURN TRUE;
;  443     0626  4                  END;
;  444     0627  4
;  445     0628  4              IF .NICE_SURVEILLANCE [0,16,8,0] EQL NMA$C_SUR_ENA
;  446     0629  4              THEN
;  447     0630  5                  EXECUTE (CNF_ENABLE_SURVEILLANCE (.IRB, .KNOWN, .CIRNAM_DSC))
```

```
;  448        0631  4              ELSE
;  449        0632  4                  EXECUTE (CNF_DISABLE_SURVEILLANCE (.IRB, .KNOWN, .CIRNAM_DSC));
;  450        0633  4              END
;  451        0634  3          ELSE                                        ! Default to setting surveillance enabled
;  452        0635  3              EXECUTE (CNF_ENABLE_SURVEILLANCE (.IRB, .KNOWN, .CIRNAM_DSC));
;  453        0636  2          END;
;  454        0637  2
;  455        0638  2      RETURN TRUE;
;  456        0639  1      END;                                        ! Routine process_request


                                                           .PSECT  $PLIT$,NOWRT,NOEXE,2

00 00 52 4F 54 41 52 55 47 49 46 4E 4F 43 0C  00004 P.AAB:  .ASCII  <12>\CONFIGURATOR\<0><0><0>          ;
                                           00  00013                                                    ;
                            45 43 41 52 54  00014 P.AAD:  .ASCII  \TRACE\                              ;
                                                00019         .BLKB   3
                                    00000005  0001C P.AAC:  .LONG   5                                    ;
                                    00000000' 00020         .ADDRESS P.AAD                               ;
74 73 65 75 71 65 72 5F 73 73 65 63 6F 72 70  00024 P.AAF:  .ASCII  \process_request\                    ;
                                                00033         .BLKB   1
                                    0000000F  00034 P.AAE:  .LONG   15                                   ;
                                    00000000' 00038         .ADDRESS P.AAF                               ;

                                              CONF=                   P.AAB


                                                           .PSECT  $CODE$,NOWRT,2

                                   0FFC 00000 PROCESS_REQUEST:
                                                      .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11  ; 0404
                   5E          08  C2 00002           SUBL2   #8, SP                                 ;
                        0000'  CF  9F 00005           PUSHAB  P.AAE                                  ; 0444
                        0000'  CF  9F 00009           PUSHAB  P.AAC                                  ; 0443
                               01  DD 0000D           PUSHL   #1                                     ;
             0000G  CF         03  FB 0000F           CALLS   #3, CNF$TRACE                          ;
                    58    04   AC  D0 00014           MOVL    IRB, R8                                ; 0446
                    56    65   A8  9E 00018           MOVAB   101(R8), NICE                          ;
                    12    0E   A8  B1 0001C           CMPW    14(R8), #18                            ; 0449
                               09  18 00020           BGEQ    1$                                     ;
                               7E  7C 00022           CLRQ    -(SP)                                  ; 0452
                               7E  D4 00024           CLRL    -(SP)                                  ;
                   7E          02  CE 00026           MNEGL   #2, -(SP)                              ;
                               45  11 00029           BRB     5$                                     ;
                   53          66  90 0002B 1$:       MOVB    (NICE), FUNCTION                       ; 0479
                   52     01   A6  90 0002E           MOVB    1(NICE), OPTION                        ; 0480
                               35  19 00032           BLSS    4$                                     ; 0482
                   13          53  91 00034           CMPB    FUNCTION, #19                          ; 0489
                               08  12 00037           BNEQ    2$                                     ;
            2C     52          06  E0 00039           BBS     #6, OPTION, 4$                         ; 0492
                               5B  D4 0003D           CLRL    PROCESSING_SHOW                        ; 0499
                               0D  11 0003F           BRB     3$                                     ; 0489
                   14          53  91 00041 2$:       CMPB    FUNCTION, #20                          ; 0503
                               23  12 00044           BNEQ    4$                                     ;
                   5B          01  D0 00046           MOVL    #1, PROCESSING_SHOW                    ; 0506
      6E    52     03          04  EF 00049           EXTZV   #4, #3, OPTION, SHOW_INFO              ; 0507
```

```
                04      52              03              00  ED  0004E 3$:      CMPZV   #0, #3, OPTION, #4                      ; 0519
                                                        14  12  00053          BNEQ    4$                                      ;
                                        51      02      A6  9A  00055          MOVZBL  2(NICE), R1                             ; 0526
                                        50      0000'   CF  9A  00059          MOVZBL  CONF, R0                                ;
                50      00      03      A6              51  2D  0005E          CMPC5   R1, 3(NICE), #0, R0, CONF+1             ;
                                                0000'   CF      00064                                                          ;
                                                        09  13  00067          BEQL    6$                                      ;
                                                        7E  7C  00069 4$:      CLRQ    -(SP)                                   ; 0529
                                                        7E  D4  0006B          CLRL    -(SP)                                   ;
                                        7E              01  CE  0006D          MNEGL   #1, -(SP)                               ;
                                                        7C  11  00070 5$:      BRB     12$                                     ;
                                0064    8F      0F      A6  B1  00072 6$:      CMPW    15(NICE), #100                          ; 0537
                                                        48  12  00078          BNEQ    9$                                      ;
                                        53      12      A6  9E  0007A          MOVAB   18(R6), R3                              ; 0547
                                FF      8F      11      A6  91  0007E          CMPB    17(NICE), #-1                           ; 0543
                                                        08  12  00083          BNEQ    7$                                      ;
                                        59              01  D0  00085          MOVL    #1, KNOWN                               ; 0546
                                        5A              53  D0  00088          MOVL    R3, NICE_SURVEILLANCE                   ; 0547
                                                        4B  11  0008B          BRB     11$                                     ; 0543
                                                        59  D4  0008D 7$:      CLRL    KNOWN                                   ; 0556
                                04      AE      11      A6  9A  0008F          MOVZBL  17(NICE), CIRNAM_LEN                    ; 0557
                                        52      08      AC  D0  00094          MOVL    CIRNAM_DSC, R2                          ; 0559
                                                04      A2  9F  00098          PUSHAB  4(R2)                                   ;
                                                08      AE  9F  0009B          PUSHAB  CIRNAM_LEN                              ;
                                0000G   CF              02  FB  0009E          CALLS   #2, CNF$GET_ZVM                         ;
                                        01              50  E8  000A3          BLBS    STATUS, 8$                              ;
                                                                04  000A6      RET                                             ;
                                08      BC      04      AE  B0  000A7 8$:      MOVW    CIRNAM_LEN, @CIRNAM_DSC                 ; 0560
                                        57              53  D0  000AC          MOVL    R3, CIRCUIT_PTR                         ; 0561
                        50              57              56  C3  000AF          SUBL3   NICE, CIRCUIT_PTR, R0                   ; 0567
                                        51      08      BC  3C  000B3          MOVZWL  @CIRNAM_DSC, R1                         ; 0568
                                        50              51  C0  000B7          ADDL2   R1, R0                                  ;
                50      0E      A8              10          00  EC  000BA      CMPV    #0, #16, 14(R8), R0                     ; 0569
                                                        09  18  000C0          BGEQ    10$                                     ;
                                                        7E  7C  000C2 9$:      CLRQ    -(SP)                                   ; 0572
                                                        03  DD  000C4          PUSHL   #3                                      ;
                                        7E              09  CE  000C6          MNEGL   #9, -(SP)                               ;
                                                        4B  11  000C9          BRB     16$                                     ;
                        04      B2              67      08  BC  28  000CB 10$:  MOVC3   @CIRNAM_DSC, (CIRCUIT_PTR), @4(R2)      ; 0576
                                        5A      08      BC  3C  000D1          MOVZWL  @CIRNAM_DSC, NICE_SURVEILLANCE          ; 0582
                                        5A              57  C0  000D5          ADDL2   CIRCUIT_PTR, NICE_SURVEILLANCE          ;
                                        56              5A  C2  000D8 11$:     SUBL2   NICE_SURVEILLANCE, R6                   ; 0588
                                        50      0E      A8  32  000DB          CVTWL   14(R8), LEN_REMAINING                   ;
                                        50              56  C0  000DF          ADDL2   R6, LEN_REMAINING                       ;
                                        1A              5B  E9  000E2          BLBC    PROCESSING_SHOW, 14$                    ; 0593
                                                        09  13  000E5          BEQL    13$                                     ; 0596
                                                        7E  7C  000E7          CLRQ    -(SP)                                   ; 0599
                                                        7E  D4  000E9          CLRL    -(SP)                                   ;
                                        7E              04  CE  000EB          MNEGL   #4, -(SP)                               ;
                                                        26  11  000EE 12$:     BRB     16$                                     ;
                                                        6E  DD  000F0 13$:     PUSHL   SHOW_INFO                               ; 0603
                                                08      AC  DD  000F2          PUSHL   CIRNAM_DSC                              ;
                                        7E              58  7D  000F5          MOVQ    R8, -(SP)                               ;
                                0000G   CF              04  FB  000F8          CALLS   #4, CNF$PROCESS_SHOW                    ;
                                                        3D  11  000FD          BRB     19$                                     ;
                                                        30  13  000FF 14$:     BEQL    18$                                     ; 0612
                                        03              50  D1  00101          CMPL    LEN_REMAINING, #3                       ; 0615
```

```
                                07 12 00104         BNEQ    15$                                      ;
        006E    8F              6A B1 00106         CMPW    (NICE_SURVEILLANCE), #110                ; 0621
                                12 13 0010B         BEQL    17$                                      ;
                                7E 7C 0010D 15$:    CLRQ    -(SP)                                    ; 0624
                7E      6E      8F 9A 0010F         MOVZBL  #110, -(SP)                              ;
                7E              1D CE 00113         MNEGL   #29, -(SP)                               ;
                                58 DD 00116 16$:    PUSHL   R8                                       ;
        0000G   CF              05 FB 00118         CALLS   #5, CNF$BUFR_ERR_MSG                     ;
                                20 11 0011D         BRB     20$                                      ; 0625
                        02      AA 95 0011F 17$:    TSTB    2(NICE_SURVEILLANCE)                     ; 0628
                                0D 13 00122         BEQL    18$                                      ;
                        08      AC DD 00124         PUSHL   CIRNAM_DSC                               ; 0632
                7E              58 7D 00127         MOVQ    R8, -(SP)                                ;
        0000V   CF              03 FB 0012A         CALLS   #3, CNF_DISABLE_SURVEILLANCE             ;
                                0B 11 0012F         BRB     19$                                      ;
                        08      AC DD 00131 18$:    PUSHL   CIRNAM_DSC                               ; 0635
                7E              58 7D 00134         MOVQ    R8, -(SP)                                ;
        0000V   CF              03 FB 00137         CALLS   #3, CNF_ENABLE_SURVEILLANCE              ;
                03              50 E9 0013C 19$:    BLBC    STATUS, 21$                              ;
                50              01 D0 0013F 20$:    MOVL    #1, R0                                   ; 0638
                                   04 00142 21$:    RET                                              ; 0639

; Routine Size:  323 bytes,    Routine Base:  $CODE$ + 0041
```

```
;  458     0640  1 %SBTTL  'cnf_enable_surveillance  '
;  459     0641  1 ROUTINE CNF_ENABLE_SURVEILLANCE (IRB, KNOWN, CIRCUITNAM_DSC) =
;  460     0642  1
;  461     0643  1 !++
;  462     0644  1 !
;  463     0645  1 !  Jacket routine to ensure common error recovery and memory
;  464     0646  1 !  deallocation for the enabling of surveillance logic.
;  465     0647  1 !
;  466     0648  1 !       irb             Interrupt request block, containing request context
;  467     0649  1 !
;  468     0650  1 !       known           If true, then set surveillance for all circuits
;  469     0651  1 !
;  470     0652  1 !       circuitnam_dsc  Descriptor for name of circuit to set surveillance on.
;  471     0653  1 !
;  472     0654  1 !  Always return success, any errors are buffered and then sent to
;  473     0655  1 !  connectee.
;  474     0656  1 !--
;  475     0657  1
;  476     0658  2     BEGIN
;  477     0659  2     LOCAL
;  478     0660  2         CIRCUIT : REF BBLOCK,
;  479     0661  2         STATUS;
;  480     0662  2     MAP
;  481     0663  2         CIRCUITNAM_DSC : REF BBLOCK;
;  482     0664  2
;  483     0665  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  484     0666  2         $DESCRIPTOR ('cnf_enable_surveillance'));
;  485     0667  2
;  486     0668  2     STATUS = ENABLE_SURVEILLANCE (.IRB, .KNOWN, .CIRCUITNAM_DSC);
;  487     0669  2     IF NOT .STATUS
;  488     0670  2     THEN                                    ! buffer up an error response
;  489     0671  2         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_MPR, 0, .STATUS)
;  490     0672  2     ELSE                                    ! Buffer up the 'Success' NICE response
;  491     0673  2         CNF$BUFR_NICE_MSG (.IRB, SUCCESS_NICE_DSC, 0);
;  492     0674  2
;  493     0675  2     !
;  494     0676  2     !   Check to ensure that there is still something under surveillance,
;  495     0677  2     !   otherwise, clear flag so that when execution returns to primary loop
;  496     0678  2     !   in CNFMAIN it will terminate.
;  497     0679  2     !
;  498     0680  2     CNF$B_SURVEILLANCE_SET = FALSE;         ! Assume none has been set
;  499     0681  2     CIRCUIT = .CNF$GQ_CIRSURLST;            ! first circuit in list
;  500     0682  2     WHILE .CIRCUIT NEQ CNF$GQ_CIRSURLST DO                  ! For every circuit
;  501     0683  3         BEGIN
;  502     0684  3         IF .CIRCUIT [CIR$B_SURVEIL] EQL NMA$C_SUR_ENA   ! If surveillance is enabled
;  503     0685  3         THEN CNF$B_SURVEILLANCE_SET = TRUE;             ! Then ensure that image execution will continue
;  504     0686  3         CIRCUIT = .CIRCUIT [CIR$L_LINK];                ! Next circuit in list
;  505     0687  2         END;                                    ! WHILE traversing Circuit linked list
;  506     0688  2
;  507     0689  2     RETURN TRUE;
;  508     0690  1     END;                                        ! Routine cnf_enable_surveillance


                                                    .PSECT  $PLIT$,NOWRT,NOEXE,2                                    ;

                        45  43  41  52  54  0003C P.AAH:  .ASCII  \TRACE\                                            ;
```

```
                                                00041          .BLKB   3
                                     00000005   00044 P.AAG:   .LONG   5
                                     00000000'  00048          .ADDRESS P.AAH                                          ;
76 72 75 73 5F 65 6C 62 61 6E 65 5F 66 6E 63    0004C P.AAJ:   .ASCII  \cnf_enable_surveillance\                       ;
                     65 63 6E 61 6C 6C 69 65    0005B                                                                  ;
                                                00063          .BLKB   1
                                     00000017   00064 P.AAI:   .LONG   23                                             ;
                                     00000000'  00068          .ADDRESS P.AAJ                                          ;


                                                               .PSECT  $CODE$,NOWRT,2

                                           0000 00000 CNF_ENABLE_SURVEILLANCE:
                                                               .WORD   Save nothing                                    ; 0641
                                0000'   CF 9F  00002           PUSHAB  P.AAI                                           ; 0666
                                0000'   CF 9F  00006           PUSHAB  P.AAG                                           ; 0665
                                        01 DD  0000A           PUSHL   #1                                              ;
                          0000G CF              03 FB  0000C   CALLS   #3, CNF$TRACE                                   ;
                                7E        08    AC 7D  00011   MOVQ    KNOWN, -(SP)                                    ; 0668
                                          04    AC DD  00015   PUSHL   IRB                                             ;
                          0000V CF              03 FB  00018   CALLS   #3, ENABLE_SURVEILLANCE                         ;
                                11              50 E8  0001D   BLBS    STATUS, 1$                                      ; 0669
                                                50 DD  00020   PUSHL   STATUS                                          ; 0671
                                                7E D4  00022   CLRL    -(SP)                                           ;
                                7E              05 CE  00024   MNEGL   #5, -(SP)                                      ;
                                          04    AC DD  00027   PUSHL   IRB                                             ;
                          0000G CF              04 FB  0002A   CALLS   #4, CNF$BUFR_ERR_MSG                            ;
                                                0E 11  0002F   BRB     2$                                              ;
                                                7E D4  00031 1$:       CLRL    -(SP)                                   ; 0673
                                     0000'      CF 9F  00033           PUSHAB  SUCCESS_NICE_DSC                        ;
                                       04       AC DD  00037           PUSHL   IRB                                     ;
                          0000G CF              03 FB  0003A           CALLS   #3, CNF$BUFR_NICE_MSG                   ;
                                     0000G      CF D4  0003F 2$:       CLRL    CNF$B_SURVEILLANCE_SET                  ; 0680
                                51   0000G      CF D0  00043           MOVL    CNF$GQ_CIRSURLST, CIRCUIT               ; 0681
                                50   0000G      CF 9E  00048 3$:       MOVAB   CNF$GQ_CIRSURLST, R0                    ; 0682
                                50              51 D1  0004D           CMPL    CIRCUIT, R0                             ;
                                                0F 13  00050           BEQL    5$                                      ;
                                          0A    A1 95  00052           TSTB    10(CIRCUIT)                             ; 0684
                                                05 12  00055           BNEQ    4$                                      ;
                          0000G CF              01 D0  00057           MOVL    #1, CNF$B_SURVEILLANCE_SET              ; 0685
                                51              61 D0  0005C 4$:       MOVL    (CIRCUIT), CIRCUIT                      ; 0686
                                                E7 11  0005F           BRB     3$                                      ; 0682
                                50              01 D0  00061 5$:       MOVL    #1, R0                                  ; 0689
                                                   04  00064           RET                                             ; 0690

; Routine Size:  101 bytes,    Routine Base:  $CODE$ + 0184
```

```
;   510     0691  1 %SBTTL  'enable_surveillance  '
;   511     0692  1 ROUTINE ENABLE_SURVEILLANCE (IRB, KNOWN, CIRCUITNAM_DSC) =
;   512     0693  1
;   513     0694  1 !++
;   514     0695  1 !
;   515     0696  1 !  Perform some checking before calling the routine which will
;   516     0697  1 !  handle the actual establishing of surveillance on a circuit by
;   517     0698  1 !  first determining if the requested circuit is an NI circuit.
;   518     0699  1 !  If known was specified, then discover all the NI circuits available.
;   519     0700  1 !
;   520     0701  1 !       irb             Interrupt request block, containing request context
;   521     0702  1 !
;   522     0703  1 !       known           If true, then set surveillance for all circuits
;   523     0704  1 !
;   524     0705  1 !       circuitnam_dsc  Descriptor for name of circuit to set surveillance on.
;   525     0706  1 !
;   526     0707  1 !--
;   527     0708  2     BEGIN
;   528     0709  2     MAP
;   529     0710  2         CIRCUITNAM_DSC : REF BBLOCK;
;   530     0711  2
;   531     0712  2     MACRO
;   532     0713  2         STRINGS_ARE_EQUAL (COMMAND) = NOT (COMMAND)%;
;   533     0714  2
;   534     0715  2     LITERAL
;   535     0716  2         NFB_ARGS = 4,
;   536     0717  2         NFBSIZ = NFB$C_LENGTH + NFB_ARGS * 4,          ! Network function block size
;   537     0718  2         P2BUFSIZ = 4 + NFB$C_CTX_SIZE,
;   538     0719  2         P4BUFSIZ = 512;
;   539     0720  2
;   540     0721  2     LOCAL
;   541     0722  2         CIRNAM_DSC :    VECTOR [2],
;   542     0723  2         DEVNAM_DSC :    VECTOR [2],
;   543     0724  2         IOSB :          BBLOCK [8],                    ! IO status block
;   544     0725  2         NFB : BBLOCK [NFBSIZ],                         ! Network function block
;   545     0726  2                                                        ! with 4 optional field ID longwords
;   546     0727  2         NFB_DESC :      VECTOR [2],                    ! Descriptor of NFB
;   547     0728  2         PTR,
;   548     0729  2         P2BUF_DSC :     VECTOR [2],                    ! Descriptor of P2 buffer
;   549     0730  2         P2BUF : BBLOCK [P2BUFSIZ],
;   550     0731  2         P4BUF_DSC :     VECTOR [2],                    ! Descriptor of P4 buffer
;   551     0732  2         P4BUF : BBLOCK [P4BUFSIZ],
;   552     0733  2         SEARCHING,
;   553     0734  2         STATUS,
;   554     0735  2         STATE,                                         ! Store circuit state
;   555     0736  2         TYPE;                                          ! Store circuit type
;   556     0737  2
;   557     0738  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;   558     0739  2         $DESCRIPTOR ('enable_surveillance'));
;   559     0740  2
;   560     0741  2
;   561     0742  2 !
;   562     0743  2 !   Translate circuit name to physical device name
;   563     0744  2 !
;   564     0745  2     CH$FILL (0, NFBSIZ, NFB);
;   565     0746  2
;   566     0747  2     NFB [NFB$B_FCT]         = NFB$C_FC_SHOW;           ! Set function to SHOW
```

```
;   567          0748  2     NFB [NFB$B_DATABASE]   = NFB$C_DB_CRI;              ! Circuit database
;   568          0749  2     NFB [NFB$B_OPER]       = NFB$C_OP_EQL;              ! Criteria for a match
;   569          0750  2     NFB [NFB$V_MULT]       = TRUE;                      !
;   570          0751  2     NFB [NFB$L_SRCH_KEY]   = NFB$C_WILDCARD;            !
;   571          0752  2 !   NFB [NFB$L_SRCH2_KEY]  = NFB$C_WILDCARD;            !
;   572          0753  2 !   NFB [NFB$B_OPER2]      = NFB$C_OP_EQL;              ! Criteria for a match
;   573          0754  2     NFB [NFB$L_FLDID]      = NFB$C_CRI_TYP;             ! Circuit type
;   574          0755  2     NFB [NFB$L_FLDID] + 4  = NFB$C_CRI_STA;             ! Circuit state
;   575          0756  2     NFB [NFB$L_FLDID] + 8  = NFB$C_CRI_NAM;             ! Circuit name
;   576          0757  2     NFB [NFB$L_FLDID] + 12  = NFB$C_CRI_VMSNAM;         ! Circuit device name
;   577          0758  2
;   578          0759  2
;   579          0760  2     NFB_DESC [0] = NFBSIZ;      ! Set up descriptor for NFB
;   580          0761  2     NFB_DESC [1] = NFB;
;   581          0762  2
;   582          0763  2     P2BUF_DSC [0] = P2BUFSIZ;
;   583          0764  2     P2BUF_DSC [1] = P2BUF;
;   584          0765  2     CH$FILL (0, P2BUFSIZ, P2BUF);
;   585          0766  2     P4BUF_DSC [0] = P4BUFSIZ;
;   586          0767  2     P4BUF_DSC [1] = P4BUF;
;   587          0768  2
;   588          0769  2     SEARCHING = TRUE;                                   ! If searching for specific
;   589          0770  2                                                         !  circuit, keep calling NETACP
;   590          0771  2
;   591          0772  2     !
;   592          0773  2     !   Call the NETACP and get a buffer full of circuit names and
;   593          0774  2     !   corresponding devices.  Keep calling until it returns
;   594          0775  2     !   SS$_ENDOFFILE.
;   595          0776  2     !
;   596          0777  2     WHILE .SEARCHING DO
;   597          0778  3         BEGIN
;   598          0779  3
;   599          0780  3         CH$FILL (0, P4BUFSIZ, P4BUF);
;   600          0781  3
;   601        P 0782  3         STATUS = $QIOW ( FUNC = IO$_ACPCONTROL, ! Obtain circuit name and circuit device name
;   602        P 0783  3                CHAN = .CNF$W_NETCHAN,           ! Use assigned channel
;   603        P 0784  3                EFN = CNF$C_SYNCH_EFN,           ! Synchronous Event flag number
;   604        P 0785  3                IOSB = IOSB,
;   605        P 0786  3                P1 = NFB_DESC,                   ! Network function block
;   606        P 0787  3                P2 = P2BUF_DSC,                  ! Work space
;   607          0788  3                P4 = P4BUF_DSC);                 ! Buffer for return strings
;   608          0789  3
;   609          0790  3         IF .STATUS
;   610          0791  3         THEN                                        ! successful submission
;   611          0792  3             STATUS = .IOSB [0,0,16,0];              ! pick up final status
;   612          0793  3
;   613          0794  3         IF NOT .STATUS
;   614          0795  3         THEN
;   615          0796  4             BEGIN
;   616          0797  4             IF .STATUS EQL SS$_ENDOFFILE
;   617          0798  4             THEN
;   618          0799  5                 BEGIN
;   619          0800  5                 IF NOT .KNOWN
;   620          0801  5                 THEN
;   621          0802  6                     BEGIN       ! We were looking for a specific circuit and didn't find it.
;   622          0803  6                     CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_IDE, NMA$C_ENT_CIR, 0, CIRCUITNAM_DSC);
;   623          0804  6                     RETURN TRUE;
```

```
;  624     0805  5                    END;
;  625     0806  5                SEARCHING = FALSE;      ! That's all she wrote, so quit the loop
;  626     0807  5                EXITLOOP;
;  627     0808  4                END;
;  628     0809  4            SIGNAL (CNF$_LOGIC, 0, .STATUS);    ! Otherwise, there was an error we'd better report
;  629     0810  4            RETURN .STATUS;
;  630     0811  3            END;
;  631     0812
;  632     0813  3        PTR = P4BUF;
;  633     0814  3
;  634     0815  3        !
;  635     0816  3        !   Cycle through circuit names returned in P4 buffer and
;  636     0817  3        !   if KNOWN is selection criteria then set surveillance on all NI
;  637     0818  3        !   circuit devices otherwise search for the requested circuit
;  638     0819  3        !   and set surveillance on it if it is an NI circuit.
;  639     0820  3        !
;  640     0821  3        INCR CIRCUITS FROM 1 TO .P2BUF DO
;  641     0822  3
;  642     0823  4            BEGIN
;  643     0824  4            TYPE = .(.PTR) < 0, 32 >;
;  644     0825  4            PTR = .PTR + 4;
;  645     0826  4
;  646     0827  4            STATE = .(.PTR) < 0, 32 >;                  ! Get circuit state
;  647     0828  4            PTR = .PTR + 4;
;  648     0829  4
;  649     0830  4            CIRNAM_DSC [0] = .(.PTR) < 0, 16 >;         ! Length of circuit name
;  650     0831  4            CIRNAM_DSC [1] = (.PTR) < 16, 8 >;          ! Address of start of circuit name
;  651     0832  4
;  652     0833  4            PTR = .PTR + 2 + .CIRNAM_DSC [0];
;  653     0834  4
;  654     0835  4            DEVNAM_DSC [0] = .(.PTR) < 0, 16 >;         ! Length of circuit name
;  655     0836  4            DEVNAM_DSC [1] = (.PTR) < 16, 8 >;          ! Address of start of circuit name
;  656     0837  4
;  657     0838  4            PTR = .PTR + 2 + .DEVNAM_DSC [0];
;  658     0839  4
;  659     0840  4            !
;  660     0841  4            !   Only interested in NI circuits with State ON
;  661     0842  4            !
;  662     0843  4            IF .TYPE EQL NMA$C_CIRTY_NI AND .STATE EQL NMA$C_STATE_ON
;  663     0844  4            THEN
;  664     0845  4                IF .KNOWN
;  665     0846  4                THEN
;  666     0847  5                    BEGIN                               ! Set surveillance on all NI circuits
;  667     0848  5                    EXECUTE (SURVEIL (CIRNAM_DSC, DEVNAM_DSC));
;  668     0849  5                    END
;  669     0850  4                ELSE
;  670     0851  5                    BEGIN                               ! Looking for a specific circuit
;  671     0852  6                    IF STRINGS_ARE_EQUAL (STR$COMPARE (.CIRCUITNAM_DSC, CIRNAM_DSC))
;  672     0853  5                    THEN
;  673     0854  6                        BEGIN
;  674     0855  6                        EXECUTE (SURVEIL (CIRNAM_DSC, DEVNAM_DSC));
;  675     0856  6                        SEARCHING = FALSE;              ! We got it and can quit now
;  676     0857  6                        EXITLOOP;
;  677     0858  5                        END;
;  678     0859  4                    END;
;  679     0860  3            END;                    ! while INCRementing through QIO return buffer
;  680     0861  2        END;                        ! WHILE performing QIOs to NETACP
```

```
;  681          0862  2
;  682          0863  2     RETURN TRUE;
;  683          0864  1     END;                        ! Routine enable_surveillance


                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

                                  45  43  41  52  54  0006C P.AAL:  .ASCII  \TRACE\                          ;
                                                  00071             .BLKB   3
                                    00000005      00074 P.AAK:  .LONG   5                                   ;
                                    00000000'     00078             .ADDRESS P.AAL                        ;
6C  6C  69  65  76  72  75  73  5F  65  6C  62  61  6E  65  0007C P.AAN:  .ASCII  \enable_surveillance\      ;
                                            65  63  6E  61  0008B                                         ;
                                                  0008F             .BLKB   1                             ;
                                    00000013      00090 P.AAM:  .LONG   19                                  ;
                                    00000000'     00094             .ADDRESS P.AAN                        ;

                                                        .EXTRN  SYS$QIOW

                                                        .PSECT  $CODE$,NOWRT,2

                                              07FC 00000 ENABLE_SURVEILLANCE:
                                                        .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10          ; 0692
                                  5E    FD6C    CE  9E 00002        MOVAB   -660(SP), SP                  ;
                                        0000'   CF  9F 00007        PUSHAB  P.AAM                         ; 0739
                                        0000'   CF  9F 0000B        PUSHAB  P.AAK                         ; 0738
                                                01  DD 0000F        PUSHL   #1                            ;
                              0000G     CF          03  FB 00011    CALLS   #3, CNF$TRACE                 ;
          20          00              6E          00  2C 00016    MOVC5   #0, (SP), #0, #32, NFB        ; 0745
                                            C8      AD  0001B                                             ;
                                C8      AD          22  90 0001D        MOVB    #34, NFB                  ; 0747
                                CA      AD          04  B0 00021        MOVW    #4, NFB+2                 ; 0748
                                C9      AD          02  88 00025        BISB2   #2, NFB+1                 ; 0750
                                CC      AD          01  D0 00029        MOVL    #1, NFB+4                 ; 0751
                                D8      AD  04010020    8F  D0 0002D    MOVL    #67174432, NFB+16         ; 0754
                                DC      AD  04010013    8F  D0 00035    MOVL    #67174419, NFB+20         ; 0755
                                E0      AD  04020041    8F  D0 0003D    MOVL    #67240001, NFB+24         ; 0756
                                E4      AD  04020042    8F  D0 00045    MOVL    #67240002, NFB+28         ; 0757
                                C0      AD          20  D0 0004D        MOVL    #32, NFB_DESC             ; 0760
                                C4      AD      C8  AD  9E 00051        MOVAB   NFB, NFB_DESC+4           ; 0761
                                B8      AD      44  8F  9A 00056        MOVZBL  #68, P2BUF_DSC            ; 0763
                                BC      AD    FF74  CD  9E 0005B        MOVAB   P2BUF, P2BUF_DSC+4        ; 0764
0044    8F          00              6E          00  2C 00061        MOVC5   #0, (SP), #0, #68, P2BUF      ; 0765
                                              FF74  CD  00068                                             ;
                              FF6C    CD      0200  8F  3C 0006B        MOVZWL  #512, P4BUF_DSC           ; 0766
                              FF70    CD            6E  9E 00072        MOVAB   P4BUF, P4BUF_DSC+4        ; 0767
                                      58            01  D0 00077        MOVL    #1, SEARCHING             ; 0769
                                      5E            58  E9 0007A 1$:    BLBC    SEARCHING, 4$             ; 0777
0200    8F          00              6E          00  2C 0007D        MOVC5   #0, (SP), #0, #512, P4BUF     ; 0780
                                                6E  00084                                                 ;
                                                7E  7C 00085        CLRQ    -(SP)                         ; 0788
                                            FF6C    CD  9F 00087        PUSHAB  P4BUF_DSC                 ;
                                                7E  D4 0008B        CLRL    -(SP)                         ;
                                            B8  AD  9F 0008D        PUSHAB  P2BUF_DSC                     ;
                                            C0  AD  9F 00090        PUSHAB  NFB_DESC                      ;
                                                7E  7C 00093        CLRQ    -(SP)                         ;
```

```
                                 E8  AD  9F 00095          PUSHAB  IOSB                                    ;
                                     38  DD 00098          PUSHL   #56                                     ;
                              7E     0000G  CF  3C 0009A          MOVZWL  CNF$W_NETCHAN, -(SP)                    ;
                                 00000000G  8F  DD 0009F          PUSHL   #CNF$C_SYNCH_EFN                        ;
                    00000000G    00         0C  FB 000A5          CALLS   #12, SYS$QIOW                           ;
                                 57         50  D0 000AC          MOVL    R0, STATUS                              ;
                                 07         57  E9 000AF          BLBC    STATUS, 2$                              ;  0790
                                 57      E8 AD  3C 000B2          MOVZWL  IOSB, STATUS                            ;  0792
                                 3A         57  E8 000B6          BLBS    STATUS, 6$                              ;  0794
                    00000870     8F         57  D1 000B9 2$:      CMPL    STATUS, #2160                           ;  0797
                                            1C  12 000C0          BNEQ    5$                                      ;
                                 13      08 AC  E8 000C2          BLBS    KNOWN, 3$                               ;  0800
                                         0C AC  9F 000C6          PUSHAB  CIRCUITNAM_DSC                          ;  0803
                                 7E         03  7D 000C9          MOVQ    #3, -(SP)                               ;
                                 7E         09  CE 000CC          MNEGL   #9, -(SP)                               ;
                                         04 AC  DD 000CF          PUSHL   IRB                                     ;
                          0000G  CF         05  FB 000D2          CALLS   #5, CNF$BUFR_ERR_MSG                    ;
                                            02  11 000D7          BRB     4$                                      ;  0804
                                            58  D4 000D9 3$:      CLRL    SEARCHING                               ;  0806
                                        008A    31 000DB 4$:      BRW     11$                                     ;  0799
                                            57  DD 000DE 5$:      PUSHL   STATUS                                  ;  0809
                                            7E  D4 000E0          CLRL    -(SP)                                   ;
                                 00000000G  8F  DD 000E2          PUSHL   #CNF$_LOGIC                             ;
                    00000000G    00         03  FB 000E8          CALLS   #3, LIB$SIGNAL                          ;
                                 50         57  D0 000EF          MOVL    STATUS, R0                              ;  0810
                                            04  000F2          RET                                             ;
                                 56            6E  9E 000F3 6$:      MOVAB   P4BUF, PTR                              ;  0813
                                               52  D4 000F6          CLRL    CIRCUITS                                ;  0821
                                               65  11 000F8          BRB     9$                                      ;
                                 59            86  7D 000FA 7$:      MOVQ    (PTR)+, TYPE                            ;  0824
                              F8 AD            66  3C 000FD          MOVZWL  (PTR), CIRNAM_DSC                       ;  0830
                              FC AD         02 A6  9E 00101          MOVAB   2(R6), CIRNAM_DSC+4                     ;  0831
                    50           56      F8 AD  C1 00106          ADDL3   CIRNAM_DSC, PTR, R0                     ;  0833
                                 56      02 A0  9E 0010B          MOVAB   2(R0), PTR                              ;
                              F0 AD            66  3C 0010F          MOVZWL  (PTR), DEVNAM_DSC                       ;  0835
                              F4 AD         02 A6  9E 00113          MOVAB   2(R6), DEVNAM_DSC+4                     ;  0836
                    50           56      F0 AD  C1 00118          ADDL3   DEVNAM_DSC, PTR, R0                     ;  0838
                                 56      02 A0  9E 0011D          MOVAB   2(R0), PTR                              ;
                                 06            59  D1 00121          CMPL    TYPE, #6                                ;  0843
                                               39  12 00124          BNEQ    9$                                      ;
                                               5A  D5 00126          TSTL    STATE                                   ;
                                               35  12 00128          BNEQ    9$                                      ;
                                 0F         08 AC  E9 0012A          BLBC    KNOWN, 8$                               ;  0845
                                            F0 AD  9F 0012E          PUSHAB  DEVNAM_DSC                              ;  0848
                                            F8 AD  9F 00131          PUSHAB  CIRNAM_DSC                              ;
                          0000V  CF         02  FB 00134          CALLS   #2, SURVEIL                             ;
                                 23         50  E8 00139          BLBS    STATUS, 9$                              ;
                                            04  0013C          RET                                             ;
                                            F8 AD  9F 0013D 8$:      PUSHAB  CIRNAM_DSC                              ;  0852
                                            0C AC  DD 00140          PUSHL   CIRCUITNAM_DSC                          ;
                    00000000G    00         02  FB 00143          CALLS   #2, STR$COMPARE                         ;
                                 12         50  E8 0014A          BLBS    R0, 9$                                  ;
                                            F0 AD  9F 0014D          PUSHAB  DEVNAM_DSC                              ;  0855
                                            F8 AD  9F 00150          PUSHAB  CIRNAM_DSC                              ;
                          0000V  CF         02  FB 00153          CALLS   #2, SURVEIL                             ;
                                 10         50  E9 00158          BLBC    STATUS, 12$                             ;
                                            58  D4 0015B          CLRL    SEARCHING                               ;  0856
```

```
                                     06  11 0015D          BRB     10$                          ; 0854
            95          52    FF74   CD  F3 0015F 9$:      AOBLEQ  P2BUF, CIRCUITS, 7$          ; 0821
                                   FF12  31 00165 10$:     BRW     1$                           ; 0777
                        50           01  D0 00168 11$:     MOVL    #1, R0                       ; 0863
                                         04 0016B 12$:     RET                                  ; 0864

; Routine Size:  364 bytes,    Routine Base:  $CODE$ + 01E9
```

```
;  685     0865  1 %SBTTL  'surveil  Begin surveillance of circuit'
;  686     0866  1 ROUTINE SURVEIL (CIRNAM_DSC, DEVNAM_DSC) =
;  687     0867  1
;  688     0868  1 !++
;  689     0869  1 !
;  690     0870  1 !  This is the routine that actually initiates surveillance of a circuit.
;  691     0871  1 !  Place circuit name and device in circuit list and initiate surveillance.
;  692     0872  1 !
;  693     0873  1 !       cirnam_dsc      For checking if this circuit is already in our list
;  694     0874  1 !                       of circuits that we know about.
;  695     0875  1 !
;  696     0876  1 !       devnam_dsc      Physical device name corresponding to the circuit
;  697     0877  1 !                       for communicating with the driver.
;  698     0878  1 !
;  699     0879  1 !--
;  700     0880  1
;  701     0881  2     BEGIN
;  702     0882  2     LOCAL
;  703     0883  2         CIR :           REF BBLOCK,
;  704     0884  2         P2_DESC :       BBLOCK [DSC$C_S_BLN],
;  705     0885  2         STATUS;
;  706     0886  2
;  707     0887  2     LITERAL
;  708     0888  2         P2BUFLEN = 72,
;  709     0889  2         REMOTE_CONSOLE_PROTOCOL = %X'260';
;  710     0890  2
;  711     0891  2     OWN
;  712     0892  2         !
;  713     0893  2         !   P2 buffer for talking with the device driver
;  714     0894  2         !
;  715     0895  2         P2BUF : BBLOCK [P2BUFLEN]
;  716     0896  2                 INITIAL (
;  717     0897  2                         WORD (NMA$C_PCLI_BUS), 64,
;  718     0898  2                         WORD (NMA$C_PCLI_BFN), 1,
;  719     0899  2                         WORD (NMA$C_PCLI_PRM), NMA$C_STATE_OFF,
;  720     0900  2                         WORD (NMA$C_PCLI_MLT), NMA$C_STATE_OFF,
;  721     0901  2                         WORD (NMA$C_PCLI_DCH), NMA$C_STATE_OFF,
;  722     0902  2                         WORD (NMA$C_PCLI_CRC), NMA$C_STATE_ON,
;  723     0903  2                         WORD (NMA$C_PCLI_PAD), NMA$C_STATE_ON,
;  724     0904  2                         WORD (NMA$C_PCLI_PTY), REMOTE_CONSOLE_PROTOCOL,
;  725     0905  2                         WORD (NMA$C_PCLI_CON), NMA$C_LINCN_NOR,
;  726     0906  2                         WORD (NMA$C_PCLI_ACC), NMA$C_ACC_SAR,
;  727     0907  2                         WORD (NMA$C_PCLI_MCA),
;  728     0908  2                                 WORD (8), WORD (NMA$C_LINMC_SET),
;  729     0909  2                                 BYTE (%X'AB'), BYTE (%X'00'),
;  730     0910  2                                 BYTE (%X'00'), BYTE (%X'02'),
;  731     0911  2                                 BYTE (%X'00'), BYTE (%X'00')
;  732     0912  2                         );
;  733     0913  2
;  734     0914  2
;  735     0915  2
;  736     0916  2     MAP
;  737     0917  2         CIRNAM_DSC :    REF BBLOCK,
;  738     0918  2         DEVNAM_DSC :    REF BBLOCK;
;  739     0919  2
;  740     0920  2
;  741     0921  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
```

```
;  742     0922  2          $DESCRIPTOR ('surveil'));
;  743     0923  2
;  744     0924  2      !
;  745     0925  2      !   Check and see if we already know about this circuit.
;  746     0926  2      !
;  747     0927  2      IF CNF$LOCATE_CIR_BLK (.CIRNAM_DSC, CIR)
;  748     0928  2      THEN
;  749     0929  3          BEGIN                                   ! Its in our list
;  750     0930  3          IF .CIR [CIR$B_SURVEIL] EQL NMA$C_SUR_ENA
;  751     0931  3          THEN RETURN TRUE;                       ! And surveillance is already set
;  752     0932  3          !
;  753     0933  3          !   Else, make sure the buffers were deallocated, since CNF$READ_SYSIDM
;  754     0934  3          !   will report an error if the buffers are there when it goes to
;  755     0935  3          !   allocate new ones.
;  756     0936  3          !   Then skip the circuit block allocation and go to the set up.
;  757     0937  3          !
;  758     0938  3          IF .CIR [CIR$L_SYSIDMBUF] NEQ 0         ! If the buffer there?
;  759     0939  3          THEN
;  760     0940  4              BEGIN                               ! If this happens, there is probably a timing bug around
;  761     0941  4              CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE *** ERROR'),
;  762     0942  4                  $DESCRIPTOR ('surveil  buffers in place on re-activation'));
;  763     0943  4              EXECUTE (CNF$FREE_VM (%REF(SYSIDM_BUFSIZ), CIR [CIR$L_SYSIDMBUF]) );
;  764     0944  4              EXECUTE (CNF$FREE_VM (%REF(ADRTYP_BUFSIZ), CIR [CIR$L_ADRTYPBUF]) );
;  765     0945  4              END;
;  766     0946  3          END
;  767     0947  2      ELSE
;  768     0948  3          !
;  769     0949  3          !   This is the first we've heard of this circuit, so create a
;  770     0950  3          !   control block for it and fill it in.
;  771     0951  3          !
;  772     0952  3          BEGIN
;  773     0953  3          EXECUTE ( CNF$GET_ZVM ( %REF(CIR$C_LENGTH), CIR));
;  774     0954  3
;  775     0955  3          CIR [CIR$W_SIZE] = CIR$C_LENGTH;
;  776     0956  3
;  777     0957  3          CIR [CIR$W_CIRNAMLEN] = .CIRNAM_DSC [DSC$W_LENGTH];     ! Save the name
;  778     0958  3          CH$MOVE ( .CIRNAM_DSC [DSC$W_LENGTH], .CIRNAM_DSC [DSC$A_POINTER],
;  779     0959  3              CIR [CIR$T_CIRNAM]);
;  780     0960  3          CIR [CIR$W_DEVNAMLEN] = .DEVNAM_DSC [DSC$W_LENGTH];     ! Save the device name
;  781     0961  3          CH$MOVE ( .DEVNAM_DSC [DSC$W_LENGTH], .DEVNAM_DSC [DSC$A_POINTER],
;  782     0962  3              CIR [CIR$T_DEVNAM]);
;  783     0963  3
;  784     0964  3          !
;  785     0965  3          !   Initialize the linked list for holding the system ID messages
;  786     0966  3          !   that will be gathered for this circuit.
;  787     0967  3          !
;  788     0968  3          CIR [CIR$L_SIDFLINK] = CIR [CIR$L_SIDFLINK];
;  789     0969  3          CIR [CIR$L_SIDBLINK] = CIR [CIR$L_SIDFLINK];
;  790     0970  3
;  791     0971  3          !
;  792     0972  3          !   Place in on our list of circuits
;  793     0973  3          !
;  794     0974  3          INSQUE (.CIR, .CNF$GQ_CIRSURLST [1]);
;  795     0975  3          END;
;  796     0976  2
;  797     0977  2      CIR [CIR$B_SURVEIL] = NMA$C_SUR_ENA;        ! Record that surveillance is enabled
;  798     0978  2
```

```
;   799          0979  2      !
;   800          0980  2      !   Assign channel to NI driver
;   801          0981  2      !
;   802          0982  2      STATUS = $ASSIGN (CHAN = CIR [CIR$W_CHAN], DEVNAM = .DEVNAM_DSC);
;   803          0983  2      IF NOT .STATUS
;   804          0984  2      THEN
;   805          0985  3          BEGIN
;   806          0986  3          SIGNAL (CNF$_CHAN, 0, .STATUS);
;   807          0987  3          CIR [CIR$B_SURVEIL] = NMA$C_SUR_DIS;    ! Record that surveillance is disabled
;   808          0988  3          RETURN .STATUS;
;   809          0989  2          END;
;   810          0990  2
;   811          0991  2      !
;   812          0992  2      !   Get ready to talk to device driver
;   813          0993  2      !
;   814          0994  2      P2_DESC = 0;                                ! Zero first longword
;   815          0995  2      P2_DESC [DSC$W_LENGTH] = P2BUFLEN;          ! Set buffer size
;   816          0996  2      P2_DESC [DSC$A_POINTER] = P2BUF;            ! Pointer to buffer
;   817          0997  2
;   818          0998  2      !
;   819          0999  2      !   Issue startup info to driver so that future reads will get only
;   820          1000  2      !   the system ID messages that are broadcast
;   821          1001  2      !
;   822        P 1002  2      STATUS = $QIOW
;   823        P 1003  2          (
;   824        P 1004  2          FUNC = (IO$_SETCHAR OR IO$M_CTRL OR IO$M_STARTUP),
;   825        P 1005  2          CHAN = .CIR [CIR$W_CHAN],
;   826        P 1006  2          EFN = CNF$C_SYNCH_EFN,                  ! Synchronous Event flag number
;   827        P 1007  2          IOSB = CIR [CIR$W_IOSB],
;   828        P 1008  2          P2 = P2_DESC
;   829          1009  2          );
;   830          1010  2
;   831          1011  2      IF NOT .STATUS
;   832          1012  2      THEN
;   833          1013  3          BEGIN
;   834          1014  3          SIGNAL (CNF$_DRVRSTRT, 0, .STATUS);
;   835          1015  3          CIR [CIR$B_SURVEIL] = NMA$C_SUR_DIS;    ! Record that surveillance is disabled
;   836          1016  3          RETURN .STATUS;
;   837          1017  2          END;
;   838          1018  2
;   839          1019  2      STATUS = .CIR [CIR$W_IOSB];                 ! pick up final status
;   840          1020  2      IF NOT .STATUS
;   841          1021  2      THEN
;   842          1022  3          BEGIN
;   843          1023  3          SIGNAL (CNF$_DRVRSTRT, 0, .STATUS);
;   844          1024  3          RETURN .STATUS;
;   845          1025  2          END;
;   846          1026  2
;   847          1027  2
;   848          1028  2      !
;   849          1029  2      !   Record the system time when surveillance began since this
;   850          1030  2      !   info is required on a SHOW request.
;   851          1031  2      !
;   852          1032  2      EXECUTE ($GETTIM (TIMADR = CIR [CIR$Q_ELAPSDTIM]) );
;   853          1033  2
;   854          1034  2      !
;   855          1035  2      !   Issue QIO to device driver to request broadcast messages
```

```
;  856          1036  2     !   and set AST for processing System ID messages as they are read.
;  857          1037  2     !
;  858          1038  2     EXECUTE (CNF$READ_SYSIDM (.CIR));
;  859          1039  2
;  860          1040  2     RETURN TRUE;
;  861          1041  1     END;                                ! Routine surveil


                                                                .PSECT  $PLIT$,NOWRT,NOEXE,2

                                                  45  43  41  52  54  00098 P.AAP:   .ASCII  \TRACE\                                ;
                                                                      0009D         .BLKB   3
                                                              00000005  000A0 P.AAO:   .LONG   5                                      ;
                                                              00000000' 000A4         .ADDRESS P.AAP                                  ;
                                              6C  69  65  76  72  75  73  000A8 P.AAR:   .ASCII  \surveil\                           ;
                                                                      000AF         .BLKB   1
                                                              00000007  000B0 P.AAQ:   .LONG   7                                      ;
                                                              00000000' 000B4         .ADDRESS P.AAR                                  ;
52  4F  52  52  45  20  2A  2A  2A  20  45  43  41  52  54  000B8 P.AAT:   .ASCII  \TRACE *** ERROR\                                 ;
                                                                      000C7         .BLKB   1
                                                              0000000F  000C8 P.AAS:   .LONG   15                                     ;
                                                              00000000' 000CC         .ADDRESS P.AAT                                  ;
72  65  66  66  75  62  20  20  6C  69  65  76  72  75  73  000D0 P.AAV:   .ASCII  \surveil  buffers in place on re-activati\       ;
72  20  6E  6F  20  65  63  61  6C  70  20  6E  69  20  73  000DF                                                                       ;
                        69  74  61  76  69  74  63  61  2D  65  000EE                                                               ;
                                                          6E  6F  000F8         .ASCII  \on\                                        ;
                                                                      000FA         .BLKB   2
                                                              0000002A  000FC P.AAU:   .LONG   42                                     ;
                                                              00000000' 00100         .ADDRESS P.AAV                                  ;

                                                                .PSECT  $OWN$,NOEXE,2

                                                      0AF1  00008 P2BUF:  .WORD   2801                                            ;
                                                  00000040  0000A         .LONG   64                                              ;
                                                      0451  0000E         .WORD   1105                                            ;
                                                  00000001  00010         .LONG   1                                               ;
                                                      0B18  00014         .WORD   2840                                            ;
                                                  00000001  00016         .LONG   1                                               ;
                                                      0B19  0001A         .WORD   2841                                            ;
                                                  00000001  0001C         .LONG   1                                               ;
                                                      0B1B  00020         .WORD   2843                                            ;
                                                  00000001  00022         .LONG   1                                               ;
                                                      0B1C  00026         .WORD   2844                                            ;
                                                  00000000  00028         .LONG   0                                               ;
                                                      0B1A  0002C         .WORD   2842                                            ;
                                                  00000000  0002E         .LONG   0                                               ;
                                                      0B0E  00032         .WORD   2830                                            ;
                                                  00000260  00034         .LONG   608                                             ;
                                                      0456  00038         .WORD   1110                                            ;
                                                  00000000  0003A         .LONG   0                                               ;
                                                      0B1E  0003E         .WORD   2846                                            ;
                                                  00000001  00040         .LONG   1                                               ;
                                                      0B0F  00044         .WORD   2831                                            ;
                                                      0008  00046         .WORD   8                                               ;
                                                      0001  00048         .WORD   1                                               ;
                                                        AB  0004A         .BYTE   -85                                             ;
```

```
                                    00  0004B          .BYTE   0                                                       ;
                                    00  0004C          .BYTE   0                                                       ;
                                    02  0004D          .BYTE   2                                                       ;
                                    00  0004E          .BYTE   0                                                       ;
                                    00  0004F          .BYTE   0                                                       ;

                                                       .EXTRN  SYS$ASSIGN, SYS$GETTIM

                                                       .PSECT  $CODE$,NOWRT,2

                                  01FC  00000 SURVEIL: .WORD   Save R2,R3,R4,R5,R6,R7,R8                               ; 0866
                 58 00000000G   00    9E  00002       MOVAB   LIB$SIGNAL, R8                                          ;
                 57 00000000G   8F    D0  00009       MOVL    #CNF$_DRVRSTRT, R7                                      ;
                 5E             10    C2  00010       SUBL2   #16, SP                                                 ;
                          0000' CF    9F  00013       PUSHAB  P.AAQ                                                   ; 0922
                          0000' CF    9F  00017       PUSHAB  P.AAO                                                   ; 0921
                                01    DD  0001B       PUSHL   #1                                                      ;
           0000G  CF            03    FB  0001D       CALLS   #3, CNF$TRACE                                           ;
                             04   AE    9F  00022       PUSHAB  CIR                                                     ; 0927
                 53          04   AC    D0  00025       MOVL    CIRNAM_DSC, R3                                          ;
                                53    DD  00029       PUSHL   R3                                                      ;
           0000V  CF            02    FB  0002B       CALLS   #2, CNF$LOCATE_CIR_BLK                                  ;
                 50             50    E9  00030       BLBC    R0, 3$                                                  ;
                 52          04   AE    D0  00033       MOVL    CIR, R2                                                 ; 0930
                             0A   A2    95  00037       TSTB    10(R2)                                                  ;
                                03    12  0003A       BNEQ    1$                                                      ;
                              0122    31  0003C       BRW     12$                                                     ;
                             38   A2    D5  0003F 1$:   TSTL    56(R2)                                                  ; 0938
                                03    12  00042       BNEQ    2$                                                      ;
                              0080    31  00044       BRW     6$                                                      ;
                          0000' CF    9F  00047 2$:   PUSHAB  P.AAU                                                   ; 0942
                          0000' CF    9F  0004B       PUSHAB  P.AAS                                                   ; 0941
                                01    DD  0004F       PUSHL   #1                                                      ;
                 0000G    CF          03    FB  00051       CALLS   #3, CNF$TRACE                                   ;
                             38   A2    9F  00056       PUSHAB  56(R2)                                                  ; 0943
                   04     AE 00000000G   8F    D0  00059       MOVL    #SYSIDM_BUFSIZ, 4(SP)                           ;
                             04   AE    9F  00061       PUSHAB  4(SP)                                                   ;
                 0000G    CF          02    FB  00064       CALLS   #2, CNF$FREE_VM                                 ;
                          27          50    E9  00069       BLBC    STATUS, 4$                                      ;
                             3C   A2    9F  0006C       PUSHAB  60(R2)                                                  ; 0944
                   04     AE 00000000G   8F    D0  0006F       MOVL    #ADRTYP_BUFSIZ, 4(SP)                           ;
                             04   AE    9F  00077       PUSHAB  4(SP)                                                   ;
                 0000G    CF          02    FB  0007A       CALLS   #2, CNF$FREE_VM                                 ;
                          45          50    E8  0007F       BLBS    STATUS, 6$                                      ;
                                      04    00082       RET                                                             ;
                             04   AE    9F  00083 3$:   PUSHAB  CIR                                                     ; 0953
                   04     AE          48    8F  9A  00086       MOVZBL  #72, 4(SP)                                      ;
                             04   AE    9F  0008B       PUSHAB  4(SP)                                                   ;
                 0000G    CF          02    FB  0008E       CALLS   #2, CNF$GET_ZVM                                 ;
                          01          50    E8  00093 4$:   BLBS    STATUS, 5$                                      ;
                                      04    00096       RET                                                             ;
                          56          04   AE    D0  00097 5$:   MOVL    CIR, R6                                         ; 0955
                       08 A6          48    8F  9B  0009B       MOVZBW  #72, 8(R6)                                      ;
                       16 A6                63  B0  000A0       MOVW    (R3), 22(R6)                                    ; 0957
           18  A6      04 B3                63  28  000A4       MOVC3   (R3), @4(R3), 24(R6)                            ; 0959
                          50          08   AC    D0  000AA       MOVL    DEVNAM_DSC, R0                                  ; 0960
                       28 A6                60  B0  000AE       MOVW    (R0), 40(R6)                                    ;
```

```
                2A   A6        04   B0              60  28 000B2          MOVC3   (R0), @4(R0), 42(R6)                ; 0962
                             40   A6        40      A6  9E 000B8          MOVAB   64(R6), 64(R6)                      ; 0968
                             44   A6        40      A6  9E 000BD          MOVAB   64(R6), 68(R6)                      ; 0969
                          0000G   DF                  66  0E 000C2          INSQUE  (R6), @CNF$GQ_CIRSURLST+4           ; 0974
                                  52        04        AE  D0 000C7 6$:      MOVL    CIR, R2                             ; 0977
                                            0A        A2  94 000CB          CLRB    10(R2)                              ;
                                                      7E  7C 000CE          CLRQ    -(SP)                               ; 0982
                                            14        A2  9F 000D0          PUSHAB  20(R2)                              ;
                                            08        AC  DD 000D3          PUSHL   DEVNAM_DSC                          ;
                    00000000G   00                      04  FB 000D6          CALLS   #4, SYS$ASSIGN                      ;
                                  53                    50  D0 000DD          MOVL    R0, STATUS                          ;
                                  0C                    53  E8 000E0          BLBS    STATUS, 7$                          ; 0983
                                                        53  DD 000E3          PUSHL   STATUS                              ; 0986
                                                        7E  D4 000E5          CLRL    -(SP)                               ;
                                       00000000G        8F  DD 000E7          PUSHL   #CNF$_CHAN                          ;
                                                        3E  11 000ED          BRB     8$                                  ;
                                            08          AE  D4 000EF 7$:      CLRL    P2_DESC                             ; 0994
                             08   AE        48          8F  9B 000F2          MOVZBW  #72, P2_DESC                        ; 0995
                             0C   AE      0000'         CF  9E 000F7          MOVAB   P2BUF, P2_DESC+4                    ; 0996
                                                        7E  7C 000FD          CLRQ    -(SP)                               ; 1009
                                                        7E  7C 000FF          CLRQ    -(SP)                               ;
                                            18          AE  9F 00101          PUSHAB  P2_DESC                             ;
                                                        7E  7C 00104          CLRQ    -(SP)                               ;
                                                        7E  D4 00106          CLRL    -(SP)                               ;
                                            0C          A2  9F 00108          PUSHAB  12(R2)                              ;
                                  7E          025A      8F  3C 0010B          MOVZWL  #602, -(SP)                         ;
                                  7E            14      A2  32 00110          CVTWL   20(R2), -(SP)                       ;
                                       00000000G        8F  DD 00114          PUSHL   #CNF$C_SYNCH_EFN                    ;
                    00000000G   00                      0C  FB 0011A          CALLS   #12, SYS$QIOW                       ;
                                  53                    50  D0 00121          MOVL    R0, STATUS                          ;
                                  0F                    53  E8 00124          BLBS    STATUS, 9$                          ; 1011
                                                        53  DD 00127          PUSHL   STATUS                              ; 1014
                                                        7E  D4 00129          CLRL    -(SP)                               ;
                                                        57  DD 0012B          PUSHL   R7                                  ;
                                  68                    03  FB 0012D 8$:      CALLS   #3, LIB$SIGNAL                      ;
                             0A   A2                    01  90 00130          MOVB    #1, 10(R2)                          ; 1015
                                                        10  11 00134          BRB     10$                                 ; 1016
                                  53          0C        A2  32 00136 9$:      CVTWL   12(R2), STATUS                      ; 1019
                                  0D                    53  E8 0013A          BLBS    STATUS, 11$                         ; 1020
                                                        53  DD 0013D          PUSHL   STATUS                              ; 1023
                                                        7E  D4 0013F          CLRL    -(SP)                               ;
                                                        57  DD 00141          PUSHL   R7                                  ;
                                  68                    03  FB 00143          CALLS   #3, LIB$SIGNAL                      ;
                                  50                    53  D0 00146 10$:     MOVL    STATUS, R0                          ; 1024
                                                        04  00149            RET                                         ;
                                            30          A2  9F 0014A 11$:     PUSHAB  48(R2)                              ; 1032
                    00000000G   00                      01  FB 0014D          CALLS   #1, SYS$GETTIM                      ;
                                  0D                    50  E9 00154          BLBC    STATUS, 13$                         ;
                                                        52  DD 00157          PUSHL   R2                                  ; 1038
                             0000G   CF                 01  FB 00159          CALLS   #1, CNF$READ_SYSIDM                 ;
                                  03                    50  E9 0015E          BLBC    STATUS, 13$                         ;
                                  50                    01  D0 00161 12$:     MOVL    #1, R0                              ; 1040
                                                        04  00164 13$:     RET                                         ; 1041

; Routine Size:  357 bytes,    Routine Base:  $CODE$ + 0355
```

```
;  863          1042  1 %SBTTL  'CNF$LOCATE_CIR_BLK   Locate and return circuit block'
;  864          1043  1 GLOBAL ROUTINE CNF$LOCATE_CIR_BLK (CIRNAMDSC, CIRBLK) =
;  865          1044  1
;  866          1045  1 !++
;  867          1046  1 ! FUNCTIONAL DESCRIPTION:
;  868          1047  1 !
;  869          1048  1 !  Using the descriptor of the ASCII circuit name, search the
;  870          1049  1 !  linked list of circuit blocks to determine the address of
;  871          1050  1 !  the circuit block for the requested circuit name.  If block
;  872          1051  1 !  is not present, return false, else return true.
;  873          1052  1 !
;  874          1053  1 ! FORMAL PARAMETERS:
;  875          1054  1 !
;  876          1055  1 !       cirnamdsc       Descriptor of circuit name
;  877          1056  1 !
;  878          1057  1 !       cirblk          Address of longword in which to the return the
;  879          1058  1 !                       address of the circuit block if it is located
;  880          1059  1 !
;  881          1060  1 ! IMPLICIT INPUTS:
;  882          1061  1 !       cnf$gq_cirsurlst        List of circuits
;  883          1062  1 !
;  884          1063  1 ! ROUTINE VALUE:
;  885          1064  1 !
;  886          1065  1 !  True    Circuit block was found and address was returned in
;  887          1066  1 !          cirblk.
;  888          1067  1 !
;  889          1068  1 !  False   Circuit block was not found
;  890          1069  1 !--
;  891          1070  1
;  892          1071  2     BEGIN
;  893          1072  2     LOCAL
;  894          1073  2         CIRCUIT :       REF BBLOCK;
;  895          1074  2     MAP
;  896          1075  2         CIRNAMDSC :     REF BBLOCK;
;  897          1076  2
;  898          1077  2     CIRCUIT = .CNF$GQ_CIRSURLST;                    ! First circuit in list
;  899          1078  2     WHILE .CIRCUIT NEQ CNF$GQ_CIRSURLST DO          ! For all circuits in list
;  900          1079  3         BEGIN
;  901          1080  3         IF CH$EQL (.CIRCUIT [CIR$W_CIRNAMLEN], CIRCUIT [CIR$T_CIRNAM],
;  902          1081  3                    .CIRNAMDSC [DSC$W_LENGTH], .CIRNAMDSC [DSC$A_POINTER])
;  903          1082  3         THEN
;  904          1083  4             BEGIN
;  905          1084  4             .CIRBLK = .CIRCUIT;                     ! Return address of matching block
;  906          1085  4             RETURN TRUE;
;  907          1086  4             END
;  908          1087  3         ELSE
;  909          1088  3             CIRCUIT = .CIRCUIT [CIR$L_LINK];        ! Get next block
;  910          1089  2         END;                            ! WHILE traversing Circuit linked list
;  911          1090  2
;  912          1091  2     RETURN FALSE;
;  913          1092  1     END;                                ! Routine CNF$LOCATE_CIR_BLK



                                        003C 00000          .ENTRY  CNF$LOCATE_CIR_BLK, Save R2,R3,R4,R5        ; 1043
```

```
                                54      0000G   CF  D0 00002          MOVL    CNF$GQ_CIRSURLST, CIRCUIT                       ; 1077
                                55        04    AC  D0 00007          MOVL    CIRNAMDSC, R5                                   ; 1081
                                50      0000G   CF  9E 0000B 1$:      MOVAB   CNF$GQ_CIRSURLST, R0                            ; 1078
                                50              54  D1 00010          CMPL    CIRCUIT, R0                                     ;
                                                19  13 00013          BEQL    3$                                              ;
      04    BC          00      18    A4        16  A4 2D 00015      CMPC5   22(CIRCUIT), 24(CIRCUIT), #0, @CIRNAMDSC, -      ; 1080
                                                04  B5     0001D              @4(R5)                                          ;
                                                    08 12 0001F      BNEQ    2$                                              ;
                                08    BC            54  D0 00021      MOVL    CIRCUIT, @CIRBLK                                ; 1084
                                50                  01  D0 00025      MOVL    #1, R0                                          ; 1085
                                                        04 00028      RET                                                     ;
                                54                  64  D0 00029 2$:  MOVL    (CIRCUIT), CIRCUIT                              ; 1088
                                                    DD  11 0002C      BRB     1$                                              ; 1078
                                                    50  D4 0002E 3$:  CLRL    R0                                              ; 1091
                                                        04 00030      RET                                                     ; 1092

; Routine Size:  49 bytes,    Routine Base:  $CODE$ + 04BA
```

```
;  915          1093  1 %SBTTL  'cnf_disable_surveillance  '
;  916          1094  1 ROUTINE CNF_DISABLE_SURVEILLANCE (IRB, KNOWN, CIRCUITNAM_DSC) =
;  917          1095  1
;  918          1096  1 !++
;  919          1097  1 !
;  920          1098  1 !  Jacket routine to ensure common error recovery and memory
;  921          1099  1 !  deallocation for the disabling of surveillance logic.
;  922          1100  1 !
;  923          1101  1 !       irb             Interrupt request block, containing request context
;  924          1102  1 !
;  925          1103  1 !       known           If true, then clear surveillance for all circuits
;  926          1104  1 !
;  927          1105  1 !       circuitnam_dsc  Descriptor for name of circuit to clear surveillance on.
;  928          1106  1 !
;  929          1107  1 !  Always return success, any errors are buffered and then sent to
;  930          1108  1 !  connectee.
;  931          1109  1 !--
;  932          1110  1
;  933          1111  2     BEGIN
;  934          1112  2     MAP
;  935          1113  2         CIRCUITNAM_DSC : REF BBLOCK;
;  936          1114  2     LOCAL
;  937          1115  2         CIRCUIT : REF BBLOCK,
;  938          1116  2         STATUS;
;  939          1117  2
;  940          1118  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  941          1119  2         $DESCRIPTOR ('cnf_disable_surveillance'));
;  942          1120  2
;  943          1121  2     STATUS = DISABLE_SURVEILLANCE (.IRB, .KNOWN, .CIRCUITNAM_DSC);
;  944          1122  2     IF NOT .STATUS
;  945          1123  2     THEN
;  946          1124  2         CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_MPR, 0, .STATUS)
;  947          1125  2     ELSE
;  948          1126  2         CNF$BUFR_NICE_MSG (.IRB, SUCCESS_NICE_DSC, 0);
;  949          1127  2
;  950          1128  2     !
;  951          1129  2     !   Check to ensure that there is still something under surveillance,
;  952          1130  2     !   otherwise, clear flag so that when execution returns to primary loop
;  953          1131  2     !   in CNFMAIN it will terminate.
;  954          1132  2     !
;  955          1133  2     CNF$B_SURVEILLANCE_SET = FALSE;
;  956          1134  2     CIRCUIT = .CNF$GQ_CIRSURLST;
;  957          1135  2     WHILE .CIRCUIT NEQ CNF$GQ_CIRSURLST DO
;  958          1136  3         BEGIN
;  959          1137  3         IF .CIRCUIT [CIR$B_SURVEIL] EQL NMA$C_SUR_ENA
;  960          1138  3         THEN CNF$B_SURVEILLANCE_SET = TRUE;
;  961          1139  3         CIRCUIT = .CIRCUIT [CIR$L_LINK];
;  962          1140  2         END;                        ! WHILE traversing Circuit linked list
;  963          1141  2
;  964          1142  2     RETURN TRUE;
;  965          1143  1     END;                            ! Routine cnf_disable_surveillance


                                                           .PSECT  $PLIT$,NOWRT,NOEXE,2

                                 45  43  41  52  54  00104 P.AAX:  .ASCII  \TRACE\                                 ;
```

```
                                                  00109          .BLKB   3
                                        00000005  0010C P.AAW:   .LONG   5                                                        ;
                                        00000000' 00110          .ADDRESS P.AAX                                                  ;
72 75 73 5F 65 6C 62 61 73 69 64 5F 66 6E 63    00114 P.AAZ:   .ASCII  \cnf_disable_surveillance\                               ;
                  65 63 6E 61 6C 6C 69 65 76    00123                                                                           ;
                                        00000018  0012C P.AAY:   .LONG   24                                                       ;
                                        00000000' 00130          .ADDRESS P.AAZ                                                  ;



                                                                 .PSECT  $CODE$,NOWRT,2

                                                  0000 00000 CNF_DISABLE_SURVEILLANCE:
                                                                 .WORD   Save nothing                                            ; 1094
                                        0000'  CF  9F 00002      PUSHAB  P.AAY                                                   ; 1119
                                        0000'  CF  9F 00006      PUSHAB  P.AAW                                                   ; 1118
                                               01  DD 0000A      PUSHL   #1                                                      ;
                                0000G  CF      03  FB 0000C      CALLS   #3, CNF$TRACE                                           ;
                                       7E  08  AC  7D 00011      MOVQ    KNOWN, -(SP)                                            ; 1121
                                           04  AC  DD 00015      PUSHL   IRB                                                     ;
                                0000V  CF      03  FB 00018      CALLS   #3, DISABLE_SURVEILLANCE                                ;
                                       11      50  E8 0001D      BLBS    STATUS, 1$                                              ; 1122
                                               50  DD 00020      PUSHL   STATUS                                                  ; 1124
                                               7E  D4 00022      CLRL    -(SP)                                                   ;
                                       7E      05  CE 00024      MNEGL   #5, -(SP)                                               ;
                                           04  AC  DD 00027      PUSHL   IRB                                                     ;
                                0000G  CF      04  FB 0002A      CALLS   #4, CNF$BUFR_ERR_MSG                                    ;
                                               0E  11 0002F      BRB     2$                                                      ;
                                               7E  D4 00031 1$:  CLRL    -(SP)                                                   ; 1126
                                        0000'  CF  9F 00033      PUSHAB  SUCCESS_NICE_DSC                                        ;
                                           04  AC  DD 00037      PUSHL   IRB                                                     ;
                                0000G  CF      03  FB 0003A      CALLS   #3, CNF$BUFR_NICE_MSG                                   ;
                                        0000G  CF  D4 0003F 2$:  CLRL    CNF$B_SURVEILLANCE_SET                                  ; 1133
                                       51  0000G  CF  D0 00043    MOVL    CNF$GQ_CIRSURLST, CIRCUIT                               ; 1134
                                       50  0000G  CF  9E 00048 3$: MOVAB   CNF$GQ_CIRSURLST, R0                                   ; 1135
                                       50      51  D1 0004D      CMPL    CIRCUIT, R0                                             ;
                                               0F  13 00050      BEQL    5$                                                      ;
                                           0A  A1  95 00052      TSTB    10(CIRCUIT)                                             ; 1137
                                               05  12 00055      BNEQ    4$                                                      ;
                                0000G  CF      01  D0 00057      MOVL    #1, CNF$B_SURVEILLANCE_SET                              ; 1138
                                       51      61  D0 0005C 4$:  MOVL    (CIRCUIT), CIRCUIT                                      ; 1139
                                               E7  11 0005F      BRB     3$                                                      ; 1135
                                       50      01  D0 00061 5$:  MOVL    #1, R0                                                  ; 1142
                                                   04 00064      RET                                                             ; 1143

; Routine Size:  101 bytes,    Routine Base:  $CODE$ + 04EB
```

```
;  967          1144  1 %SBTTL  'disable_surveillance  '
;  968          1145  1 ROUTINE DISABLE_SURVEILLANCE (IRB, KNOWN, CIRCUITNAM_DSC) =
;  969          1146  1 !++
;  970          1147  1 !
;  971          1148  1 !  Perform some checking before calling the routine which will
;  972          1149  1 !  handle the actual disabling of surveillance on a circuit by
;  973          1150  1 !  first determining if the requested circuit has surveillance set.
;  974          1151  1 !  If known was specified, then discover all the NI circuits available.
;  975          1152  1 !
;  976          1153  1 !       irb             Interrupt request block, containing request context
;  977          1154  1 !
;  978          1155  1 !       known           If true, then clear surveillance for all circuits
;  979          1156  1 !
;  980          1157  1 !       circuitnam_dsc  For checking if this circuit is in our list
;  981          1158  1 !                       of circuits.
;  982          1159  1 !--
;  983          1160  2     BEGIN
;  984          1161  2     LOCAL
;  985          1162  2         CIRCUIT :       REF BBLOCK;
;  986          1163  2     MAP
;  987          1164  2         CIRCUITNAM_DSC : REF BBLOCK;
;  988          1165  2
;  989          1166  2     CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),
;  990          1167  2         $DESCRIPTOR ('disable_surveillance'));
;  991          1168  2
;  992          1169  2     IF .KNOWN
;  993          1170  2     THEN
;  994          1171  2         !
;  995          1172  2         !   For every circuit in the list, disable surveillance
;  996          1173  2         !
;  997          1174  3         BEGIN
;  998          1175  3         CIRCUIT = .CNF$GQ_CIRSURLST;
;  999          1176  3         WHILE .CIRCUIT NEQ CNF$GQ_CIRSURLST DO
; 1000          1177  4             BEGIN
; 1001          1178  4             EXECUTE (CNF$DISABLE_SURVEIL (.CIRCUIT));
; 1002          1179  4             CIRCUIT = .CIRCUIT [CIR$L_LINK];
; 1003          1180  3             END;                        ! WHILE traversing circuit linked list
; 1004          1181  3         END
; 1005          1182  2     ELSE
; 1006          1183  2         !
; 1007          1184  2         !   If the circuit is in our list, then disable surveillance,
; 1008          1185  2         !   otherwise buffer an error for return to connectee.
; 1009          1186  2         !
; 1010          1187  3         BEGIN
; 1011          1188  3         IF CNF$LOCATE_CIR_BLK (.CIRCUITNAM_DSC, CIRCUIT)
; 1012          1189  3         THEN
; 1013          1190  4             EXECUTE (CNF$DISABLE_SURVEIL (.CIRCUIT))
; 1014          1191  3         ELSE
; 1015          1192  4             BEGIN                       ! This circuit not in data base
; 1016          1193  4             CNF$BUFR_ERR_MSG (.IRB, NMA$C_STS_IDE, NMA$C_ENT_CIR, 0,
; 1017          1194  4                 .CIRCUITNAM_DSC);
; 1018          1195  4             RETURN TRUE;
; 1019          1196  3             END;
; 1020          1197  2         END;
; 1021          1198  2
; 1022          1199  2     RETURN TRUE;
; 1023          1200  1     END;                            ! Routine disable_surveillance
```

```
                                                                                .PSECT  $PLIT$,NOWRT,NOEXE,2

                                                45  43  41  52  54  00134 P.ABB:  .ASCII  \TRACE\                                          ;
                                                                    00139        .BLKB   3
                                                        00000005    0013C P.ABA: .LONG   5                                                  ;
                                                        00000000'   00140        .ADDRESS P.ABB                                             ;
6C  69  65  76  72  75  73  5F  65  6C  62  61  73  69  64  00144 P.ABD: .ASCII  \disable_surveillance\                                      ;
                                                65  63  6E  61  6C  00153                                                                ;
                                                        00000014    00158 P.ABC: .LONG   20                                                 ;
                                                        00000000'   0015C        .ADDRESS P.ABD                                             ;


                                                                                .PSECT  $CODE$,NOWRT,2

                                                            0000 00000 DISABLE_SURVEILLANCE:
                                                                                .WORD   Save nothing                                       ; 1145
                                            5E                  04  C2 00002       SUBL2   #4, SP                                             ;
                                                    0000'       CF  9F 00005       PUSHAB  P.ABC                                              ; 1167
                                                    0000'       CF  9F 00009       PUSHAB  P.ABA                                              ; 1166
                                                                01  DD 0000D       PUSHL   #1                                                 ;
                                        0000G       CF              03  FB 0000F   CALLS   #3, CNF$TRACE                                      ;
                                            1D          08          AC  E9 00014   BLBC    KNOWN, 2$                                           ; 1169
                                            6E      0000G       CF  D0 00018   MOVL    CNF$GQ_CIRSURLST, CIRCUIT                           ; 1175
                                            50      0000G       CF  9E 0001D 1$:   MOVAB   CNF$GQ_CIRSURLST, R0                               ; 1176
                                            50                  6E  D1 00022       CMPL    CIRCUIT, R0                                         ;
                                                                37  13 00025       BEQL    4$                                                  ;
                                                                6E  DD 00027       PUSHL   CIRCUIT                                             ; 1178
                                        0000V       CF              01  FB 00029   CALLS   #1, CNF$DISABLE_SURVEIL                          ;
                                            30                  50  E9 0002E       BLBC    STATUS, 5$                                          ;
                                                                9E  DD 00031       PUSHL   @CIRCUIT                                            ; 1179
                                                                E8  11 00033       BRB     1$                                                  ; 1176
                                                                5E  DD 00035 2$:   PUSHL   SP                                                  ; 1188
                                                    0C          AC  DD 00037       PUSHL   CIRCUITNAM_DSC                                      ;
                                        FF2B        CF              02  FB 0003A   CALLS   #2, CNF$LOCATE_CIR_BLK                           ;
                                            0B                  50  E9 0003F       BLBC    R0, 3$                                              ;
                                                                6E  DD 00042       PUSHL   CIRCUIT                                             ; 1190
                                        0000V       CF              01  FB 00044   CALLS   #1, CNF$DISABLE_SURVEIL                          ;
                                            12                  50  E8 00049       BLBS    STATUS, 4$                                          ;
                                                                    04 0004C       RET                                                         ;
                                                    0C          AC  DD 0004D 3$:   PUSHL   CIRCUITNAM_DSC                                      ; 1194
                                            7E                  03  7D 00050       MOVQ    #3, -(SP)                                           ; 1193
                                            7E                  09  CE 00053       MNEGL   #9, -(SP)                                           ;
                                                    04          AC  DD 00056       PUSHL   IRB                                                 ;
                                        0000G       CF              05  FB 00059   CALLS   #5, CNF$BUFR_ERR_MSG                             ;
                                            50                  01  D0 0005E 4$:   MOVL    #1, R0                                              ; 1199
                                                                    04 00061 5$:   RET                                                         ; 1200

; Routine Size:  98 bytes,    Routine Base:  $CODE$ + 0550
```

```
;  1025          1201  1 %SBTTL  'CNF$DISABLE_SURVEIL:  clean up circuit block entry and quit surveillance'
;  1026          1202  1 GLOBAL ROUTINE CNF$DISABLE_SURVEIL (CIR) =
;  1027          1203  1
;  1028          1204  1 !++
;  1029          1205  1 ! FUNCTIONAL DESCRIPTION:
;  1030          1206  1 !
;  1031          1207  1 !  This is the routine that actually terminates surveillance of a circuit.
;  1032          1208  1 !
;  1033          1209  1 ! FORMAL PARAMETERS:
;  1034          1210  1 !
;  1035          1211  1 !       cir     Circuit control block.
;  1036          1212  1 !
;  1037          1213  1 ! IMPLICIT INPUTS:
;  1038          1214  1 !       NONE
;  1039          1215  1 !
;  1040          1216  1 ! IMPLICIT OUTPUTS:
;  1041          1217  1 !       NONE
;  1042          1218  1 !
;  1043          1219  1 ! ROUTINE VALUE:
;  1044          1220  1 ! COMPLETION CODES:
;  1045          1221  1 !       NONE
;  1046          1222  1 !
;  1047          1223  1 ! SIDE EFFECTS:
;  1048          1224  1 !       NONE
;  1049          1225  1 !
;  1050          1226  1 !--
;  1051          1227  1
;  1052          1228  2     BEGIN
;  1053          1229  2     MAP
;  1054          1230  2         CIR : REF BBLOCK;
;  1055          1231  2     LOCAL
;  1056          1232  2         SID : REF BBLOCK,
;  1057          1233  2         STATUS;
;  1058          1234  2
;  1059          1235  2
;  1060          1236  2     CIR [CIR$B_SURVEIL] = NMA$C_SUR_DIS;        ! Mark surveillance disabled
;  1061          1237  2
;  1062          1238  2     EXECUTE ( $DASSGN (CHAN = .CIR [CIR$W_CHAN]) );     ! Terminate read of System ID's
;  1063          1239  2
;  1064          1240  2     !
;  1065          1241  2     !   Deallocate all the memory used to store system ID messages
;  1066          1242  2     !   gathered for the circuit
;  1067          1243  2     !
;  1068          1244  2     SID = .CIR [CIR$L_SIDFLINK];
;  1069          1245  2     WHILE .SID NEQ CIR [CIR$L_SIDFLINK] DO
;  1070          1246  3         BEGIN
;  1071          1247  3         REMQUE (.SID, STATUS);
;  1072          1248  3         EXECUTE (CNF$FREE_VM (%REF(SID$C_LENGTH), SID));
;  1073          1249  3         SID = .CIR [CIR$L_SIDFLINK];
;  1074          1250  2         END;
;  1075          1251  2
;  1076          1252  2     !
;  1077          1253  2     !   Record time when surveillance was discontinued
;  1078          1254  2     !
;  1079          1255  2     EXECUTE ($GETTIM (TIMADR = CIR [CIR$Q_ELAPSDTIM]) );
;  1080          1256  2
;  1081          1257  2     RETURN TRUE;
```

```
; 1082          1258  1       END;                          ! Routine cnf$disable_surveil


                                                                       .EXTRN  SYS$DASSGN

                                               000C 00000              .ENTRY  CNF$DISABLE_SURVEIL, Save R2,R3                    ; 1202
                          5E                08   C2 00002              SUBL2   #8, SP                                             ;
                          52          04    AC   D0 00005              MOVL    CIR, R2                                            ; 1236
                     0A   A2                01   90 00009              MOVB    #1, 10(R2)                                         ;
                          7E          14    A2   32 0000D              CVTWL   20(R2), -(SP)                                      ; 1238
            00000000G     00                01   FB 00011              CALLS   #1, SYS$DASSGN                                     ;
                          4B                50   E9 00018              BLBC    STATUS, 3$                                         ;
                     04   AE          40    A2   D0 0001B              MOVL    64(R2), SID                                        ; 1244
       52            04   AC 00000040       8F   C1 00020              ADDL3   #64, CIR, R2                                       ; 1245
                          52          04    AE   D1 00029 1$:          CMPL    SID, R2                                            ;
                                            25   13 0002D              BEQL    2$                                                 ;
                          53          04    BE   0F 0002F              REMQUE  @SID, STATUS                                       ; 1247
                                      04    AE   9F 00033              PUSHAB  SID                                                ; 1248
                     04   AE                25   D0 00036              MOVL    #37, 4(SP)                                         ;
                                      04    AE   9F 0003A              PUSHAB  4(SP)                                              ;
                  0000G   CF                02   FB 0003D              CALLS   #2, CNF$FREE_VM                                    ;
                          21                50   E9 00042              BLBC    STATUS, 3$                                         ;
       52            04   AC 00000040       8F   C1 00045              ADDL3   #64, CIR, R2                                       ; 1249
                     04   AE                62   D0 0004E              MOVL    (R2), SID                                          ;
                                            D5   11 00052              BRB     1$                                                 ; 1245
       7E            04   AC                30   C1 00054 2$:          ADDL3   #48, CIR, -(SP)                                    ; 1255
            00000000G     00                01   FB 00059              CALLS   #1, SYS$GETTIM                                     ;
                          03                50   E9 00060              BLBC    STATUS, 3$                                         ;
                          50                01   D0 00063              MOVL    #1, R0                                             ; 1257
                                                 04 00066 3$:          RET                                                        ; 1258

; Routine Size:  103 bytes,    Routine Base:  $CODE$ + 05B2
```

```
; 1084        1259  1 END                                ! End of module CNFREQUES
; 1085        1260  0 ELUDOM


                                                                .EXTRN  LIB$SIGNAL

;                                PSECT SUMMARY
;
;      Name                      Bytes                          Attributes
;
;  $PLIT$                          352  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $OWN$                            80  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                         1561  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                             Library Statistics
;                                        -------- Symbols --------      Pages       Processing
;      File                              Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]STARLET.L32;1      9776        15         0         581        00:01.0
;  _$255$DUA28:[SHRLIB]NET.L32;1          1279        16         1          63        00:00.8
;  _$255$DUA28:[SHRLIB]NMALIBRY.L32;1      887        37         4          47        00:00.8


;                                  COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:CNFREQUES/OBJ=OBJ$:CNFREQUES MSRC$:CNFREQUES/UPDATE=(ENH$:CNFREQUES)

; Size:          1561 code + 432 data bytes
; Run Time:          00:33.3
; Elapsed Time:      01:01.0
; Lines/CPU Min:      2268
; Lexemes/CPU-Min: 18605
; Memory Used:  213 pages
; Compilation Complete
```

NICNF

CNFDEF
SDL

CNFDEF
LIS

NETTRN
LIS

NICONFIG
MAP

NETTREE
LIS

CNFMAIN
LIS

CNFREQUES
LIS

SERVER
LIS

CNFINTRPT
LIS

CNFWQDEF
SDL

CNFPREFIX
REQ

CNFMSG
LIS

CNFSEND
LIS

CNFSTORE
LIS

NML.SHR
MAP

CNFSHOW
LIS

CNFWQDEF
LIS

NPADEF
MDL

NMAHEAD
B32

NPAMAC
MAR

NMATAIL
B32

NML

NML
MAP

NMLDDL
B32

NMLDEF
MDL

NMAFILES
LIS

NMAFIELDS
LIS

CNFWORKQ
LIS